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## GP management of health-related anxiety: application and evaluation of a brief cognitive behavioural training proram

Leah Giarratano  
*University of Wollongong*

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# GP management of health-related anxiety: Application and Evaluation of a Brief Cognitive Behavioural Training Program

A thesis submitted in partial fulfilment of the requirements for the award of the degree of

**Doctor of Psychology (Clinical)**

from

**UNIVERSITY OF WOLLONGONG**

by

Leah Giarratano *B.A Hons., M.Psychol.*

*(Clinical)*

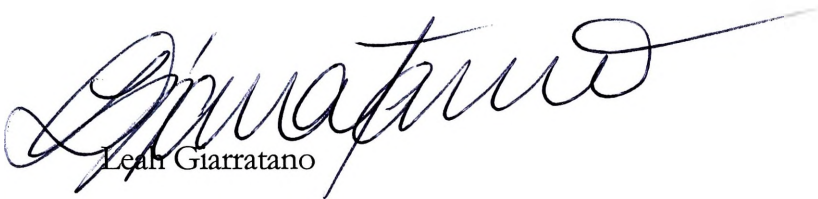
**Department of Psychology**

**Faculty of Health and Behavioural  
Sciences**

**2005**

## **Thesis certification**

I, Leah Giarratano, declare that this thesis, submitted in partial fulfilment of the requirements for the award of Doctor of Psychology (Clinical), is the result of my own research, except where otherwise acknowledged, and has not been submitted for qualification at any other academic institution.



Leah Giarratano

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I would like to express appreciation to my supervisor in the production of this thesis, Associate Professor Craig Gonsalves; to Lee James and Stephen Rayner for their friendship and support throughout completion of this degree; to Dr Robert Brooks for statistical advice and support relating to this research; to Tee and my mum; and to Joshua George for absolutely everything.



## **Abstract**

This thesis examined the psychological profile of a group of patients experiencing health-related anxiety presenting to doctors in general medical practice. It also evaluated the effects of a brief cognitive behavioural training program for GPs, both in terms of the program's impact upon these patients, and upon their general practitioners' (GPs') knowledge and confidence to use the techniques imparted.

This project is divided into three investigations. The first investigated personality traits, coping styles, illness perceptions, and psychological symptoms in a group of sixty-six patients experiencing health-related anxiety presenting to Australian GPs. The results found that, compared to non-clinical populations, these patients had higher levels of neuroticism and lower levels of extraversion; they used significantly fewer problem-focused coping strategies; their perception of their symptoms was less adaptive; and they had higher levels of anxiety, depression and somatisation. Several psychological variables were found to predict levels of emotional distress in these patients. A combination of personality (Neuroticism) and illness perception variables (beliefs about the consequences of the symptoms, and the sense of coherence or understanding that patients had about the symptoms) best predicted depression levels. Dysfunctional coping, illness-perception and personality (Avoidance-Disengagement coping, thoughts about the severity of consequences, and Neuroticism) predicted anxiety levels. There was just one significant predictor of Somatisation levels: an Avoidance-Disengagement coping style.

The second investigation in this study measured whether a brief training program for GPs in rudimentary cognitive behaviour therapy techniques could increase GP knowledge and confidence in using these skills. Results indicated that training did significantly increase pre-training knowledge and confidence in the cognitive behavioural skills imparted; however although confidence levels in using the skills were maintained for six-months

post-training, there was a significant reduction in GP knowledge relating to these skills six-months after completion of the program.

The third study employed a randomised control design to investigate the impact of the CBT training program upon patients of the GPs. Trained and untrained GPs each recruited patients with somatic symptoms for which no purely physical explanation could be found. Following tests excluding obvious physical illness, trained GPs recounted a cognitive-behavioural explanation for the patients' symptoms, and taught at least one strategy for managing the symptoms (Experimental Group). Untrained GPs gave feedback to their patients in line with their typical approach in such cases (Pre-Training Control Group). Following GP intervention, all patients re-completed measures of coping styles, illness perceptions, and psychological symptoms. This study found that, regardless of training status, GP consultation and GP reassurance about test results produced significant improvements in a large number of measures of psychological functioning; including reduced anxiety, depression and somatisation levels; reduced distress about symptoms; increased understanding of symptoms; increased use of adaptive coping strategies; and a decrease in focusing upon and ventilating about worry.

When these patients consulted GPs who had been trained to provide feedback and instruction from a cognitive-behavioural perspective, there was an additional, positive effect on 'personal control', in that patients felt significantly more able to control the symptoms, course and severity of their problems than patients consulting untrained GPs. Training also increased the use of positive reinterpretation and denial as coping strategies. These findings are discussed within the perspective of cognitive conceptualisations of health-related anxiety, and several implications for GP training and GP management of such clients are articulated.

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## **General introduction**

Sections 1 and 2 of this document present a review of literature pertinent to health-related anxiety, with Section 1 focusing upon the impact of these problems in medical settings and upon the relevant terminology in the area. Section 2 explores the interactive role of thoughts, behaviours, emotions, and personality predispositions upon the development and maintenance of health-related anxiety. Studies and models are reviewed from health psychology (illness perceptions or cognitions), the coping literature, personality theory and cognitive behavioural theory, with the aim of demonstrating that a converging literature exists indicating a biopsychosocial/ interactionist theory best explains the development and maintenance of health-related anxiety. Sections 3 through 5 present the three studies that make up this project, while Section 6 presents the limitations of the project as a whole, and proposes directions for future research.

### **1. Psychological symptoms in General Practice patients**

Patients with psychological symptoms and disorders present frequently to general practitioners (GPs), and represent significant costs to our society. In Australia, approximately 63% of people presenting to general practitioners have been found to have some evidence of mental disorder (Hickie, Davenport, Naismith & Scott, 2001), and GPs are the preferred point of first contact among health care professionals for people experiencing depression (Hickie, Highet & Davenport, 2002). Goldberg & Huxley (1980) estimated that in the UK, 13% of the adult population is affected by a mental disorder at any given time, and 95% of these people attend their general practitioner during the course of their disturbance, with only 10% referred on to secondary care (Goldberg, 1995; Hemmings, 2000). This implies that 85-90% of those patients believed to be suffering

from a psychiatric condition described in DSM IV are frequently consulting their general practitioner for assistance. Other studies have found that between one quarter and one third of all primary care patients suffer some form of psychological distress (Blacker & Clare, 1988; Bridges & Goldberg, 1985; Gulbrandsen, Hjortdahl & Fugelli, 1997; Monk-Jorgensen, Fink & Brevik, 1997); that these problems are the primary reason for the visit in around 9% of all GP consultations (Hemmings, 2000); and that psychiatric disorders are under-recognised in primary care (Blacker & Clare, 1988; Bridges & Goldberg, 1985; Goldberg & Huxley, 1980; Kessler, Lloyd, Lewis, Gray & Heath, 1999; Monk-Jorgensen et al, 1997; World Health Organisation, 1995).

In addition, there are many patients who present to general practitioners with symptoms that do not meet full criteria for a psychiatric diagnosis, but nevertheless, their problems are largely psychological in origin. For example, patients with somatic preoccupations, or health-related anxiety, believe that their symptoms are evidence of illness or disease, and are typically not reassured when they are told that there is no sign of physical disease. These persistent physical symptoms, which cannot be accounted for in terms of physical pathology, have been recognised in general practice for centuries (Blackmore, 1985; Peters, Stanley, Rose, Kaney & Salmon, 2002). In the past they have been labelled hysteria (Mettler, 1898), or neurasthenia (Mott, 1918), and there are a variety of terms used today that are introduced later in this section. In the US, although anxiety about physical complaints or symptoms are the most common presenting problem to GPs (Hemmings, 2000; Lipsitt, 1996), some studies have found that less than 25% of these physical complaints have known or demonstrable organic or biological causes (Nezu, Nezu & Lombardo, 2001). For example, Kroenke & Mangelsdorf (1989) found around 75% of 1000 patients presented with symptoms with no documented medical cause.

Barsky and Borus (1995) found that “no serious medical cause” was the diagnosis in 25% to 50% of all primary care visits in their US study.

These unexplained somatic symptoms are perplexing, often debilitating, and are distressing over a long period of time for many of these patients. One of the most common anxieties about health based on physical symptoms is a fear that one has heart disease, when the physical symptoms experienced are in fact caused by tension, anxiety, overbreathing (hyperventilation), or panic attacks. For example, approximately half of the new referrals to cardiac clinics with the complaint of chest pain are found not to have heart disease or any other serious physical disorder. Despite having normal life expectations and prognosis, between 50-70% of these patients continue to experience symptoms, worry about heart disease, restrict their activities and seek medical help (Bass & Mayou, 1995; Bass & Wade 1984; Mayou, Bryant, Fofar & Clark, 1994; Mayou, Bryant, Sanders, Bass, Klimes & Forfar, 1997). Mayou et al., (1997) propose that the reasons for misinterpretation of minor physical symptoms in this population include previous psychological problems, experience of heart disease in others leading to increased awareness of heart disease, panic attacks and severe symptoms of anxiety, and ambiguous, inconsistent or incorrect medical information. While there has been some evidence that panic attacks/ disorder and anxiety have been associated with coronary artery spasm and cardiac risk (e.g., Kawachi, Colditz & Ascherio, 1994; Kawachi, Sparrow, Vokonas & Weiss, 1994; Mansour, Wilkinson, Jennings, Schwarz, Thompson & Esler, 1998), after reviewing key studies, the National Heart Foundation of Australia position update (2003) concluded that “there was neither strong nor consistent evidence of a causal association between anxiety and panic disorders and CHD [coronary heart disease]” (Bunker, Colquhoun, Esler, Hickie, Hunt, Jelinek, Oldenburg, Peach, Ruth, Tennant & Tonkin, 2003, p. 274).

Unexplained medical symptoms in general are often the result of feelings of anxiety or depression, or arise following the misinterpretation of normal body sensations as evidence of disease where none exists (e.g., Peveler, Kilkenny & Kinmonth, 1997; Portegijs, van der Horst, Proot, Kraan, 1996). In short, GPs are faced daily with numerous patients who are anxious about physical symptoms that are unable to be tied directly to an organic illness or disease. Some of these patients feel that GPs who find no positive results for physical illness are implying that their real physical symptoms are 'all in their head', and may disregard the doctor's negative findings and keep monitoring for signs of physical illness. Peter, Stanley, Rose and Salmon (1994) reported that patients with medically unexplained symptoms perceived doctors as incompetent and inexperienced if their feedback did not explain, or seemed to question, the reality of their symptoms.

Despite the fact that many of their consultations involve psychological components to the presenting problem, GPs have traditionally tended to prefer a predominantly biomedical model of disease (Hemmings, 2000). Peveler et al, (1997) point out that because doctors are trained to expect that physical symptoms will point to physical disease, and because they are anxious about the possibility of misdiagnosis, "they may engage in an exhaustive but ultimately fruitless search before reaching the conclusion that no physical disease is present to explain the symptoms" (p.245). This is expensive, especially when considering the numbers of medically unexplainable symptoms presenting in primary care, and it may also leave some patients convinced that there must be some disease present because otherwise the doctor would not have been so keen to test. When faced with no explanation for the symptoms, some patients believe that the doctor has 'missed' the cause, and they stay vigilant for symptoms. Interpretation of these symptoms as potentially sinister, and focusing of attention upon them, leaves the patient increasingly anxious, which results in increased physiological

arousal, and more physical symptoms related to the increased anxiety (Cioffi, 1991; Gijbbers van Wijk, & Kolk, 1997; Kirmayer & Taillefer, 1997; Kolk, 2000; Pennebaker, 1982).

### **1.1. Terminology**

Trying to determine the extent of somatising patients in general practice is difficult because different researchers use different terminology and criteria to describe these patients: “The topic of medically unexplained physical symptoms is dogged by terminological confusion” (Peveler, Kilkenny & Kinmonth, 1997, p. 245). The criteria for each of these health-related anxiety conditions range from loose descriptions devised by the author of the particular term, to formal well-accepted diagnostic criteria for a specific psychiatric disorder. It was considered important for the current investigation to consider a wide range of these terms generally describing health-related anxiety rather than selecting and studying a group of patients who meet one specific diagnosis. The rationale for this is that the GPs who are confronted with such patients rarely make a diagnosis or assign a patient to a particular category and this project as a whole attempts to capture a realistic snapshot of primary care patients, rather than a narrow group of patients with a clearly defined specific disorder. Indeed, the very heterogeneity of such patients is one of the major difficulties for GPs who treat them. This point is also discussed further in subsequent sections of this document.

Some of the health-related anxiety terminology, beginning with formal diagnoses for psychiatric conditions, is discussed further below.

The *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV; American Psychiatric Association, 1994) presents a range of psychiatric diagnoses collectively referred to as somatoform disorders, with the common feature being the presence of physical

symptoms that suggest a general medical condition, but which are not fully explained by a general medical condition, by the direct effects of a substance, or by another mental disorder (e.g., panic disorder). The *DSM-IV* somatoform disorders include:

- Somatisation disorder: a poly-symptomatic disorder (including a combination of pain, gastrointestinal, sexual and pseudoneurological symptoms), with the somatic complaint considered clinically significant if it results in medical treatment or significantly impairs functioning. Lifetime prevalence rates range from 0.2% to 2% among women, and less than 0.2% in men (American Psychiatric Association, 1994).
- Undifferentiated somatoform disorder: This is a residual category for those individuals who do not meet full criteria for somatisation disorder or any other somatoform disorder.
- Conversion disorder: involves unexplained symptoms or deficits affecting voluntary motor or sensory function that suggest a neurological or other general medical condition.
- Pain disorder is characterised by pain as the predominant focus of clinical attention, with psychological factors playing an important role in the onset, severity, exacerbation or maintenance of the pain.
- Hypochondriasis: is the preoccupation with the fear of having, or the idea that one has, a serious disease, based upon the individual's misinterpretation of bodily symptoms or bodily functions. The prevalence in a general medical practice population has been reported to be between 4% and 9% (American Psychiatric Association, 1994); although a large, more recent study found the incidence to be lower: Gureje, Üstün & Simon (1997) found from a sample of 5447 patients



making ambulatory visits to primary care clinics at 15 sites across 14 countries, the occurrence of ICD-10 (World Health Organisation, 1993) diagnosed hypochondriasis was 0.8%, and almost exactly the same when using DSM-II-R criteria. Other published data have estimated higher rates of hypochondriasis in general practice populations – between 3% and 13%, (Kellner, 1985; Kirmayer & Robbins, 1991; Noyes, Kathol, Fisher, Phillips, Suelzer & Holt, 1993), but Gureje, Üstün & Simon (1997) believe that methodological difficulties and definitional problems overestimated the prevalence in these studies.

- Body dysmorphic disorder is the preoccupation with an imagined or exaggerated defect in physical appearance.
- Somatoform disorder not otherwise specified is included by DSM-IV for coing disorders with somatoform symptoms that do not meet criteria for any of the other somatoform disorders.

*Non-sickness* is another term used in the literature, and is said to be the most frequent diagnosis made in general practice (Brown, Robertson, Kosa & Alpert, 1971; Quill, 1985); this term includes those with formal somatisation disorders (Lidbeck, 1997). Diagnosable somatoform disorders have been found at levels between 12% and 14% amongst general practice attendees (e.g., see Barsky, Ettner, Horsky & Bates, 2001), and are more common in women (American Psychiatric Association, 1994; Scicchitano, Lovell, Pearce, Marley & Pilowsky, 1996). However less restrictively defined forms of somatisation are far more common in general practice, and are associated with considerable comorbidity and disability (Escobar, Golding, Hough, Karno, Burman & Wells, 1987; Gureje, Üstün & Simon, 1997).

For example, Gureje, Üstün and Simon (1997) believe that the formal psychiatric diagnosis of hypochondriasis is too restrictive for use in primary care settings, under-detecting many people with significant hypochondriacal tendencies. Righter and Sansone (1999) agree that many somatising patients do not meet full threshold for a diagnosable somatoform disorder, but nevertheless prove a significant clinical challenge for physicians. They use the term *somatically preoccupied* patients to describe such individuals, defining this group as “patients who have no genuine physical disorder but manifest psychologic conflicts in a somatic fashion” (p. 3113). The literature abounds with many other such terms that are not intended as formal psychiatric diagnoses, but which aim to describe an observed behaviour or clinical phenomenon, often in the context of general medical practice.

For example, in 1978, Pilowsky used the term *abnormal illness behavior* as the identification of:

*“The persistence of an inappropriate of maladaptive mode of perceiving, evaluating and acting in relation to one’s health, despite the fact that a doctor (or other appropriate social agent) has offered a reasonably lucid explanation of the nature of the illness and the appropriate course of management to be followed, based on a thorough examination and assessment of all parameters of functioning (including the use of special investigations where necessary), and taking into account the individual’s age, educational and sociocultural background” (Pilowsky, 1978, 131).*

The term *medically unexplained symptoms* (e.g., Melville, 1987; Nezu et al, 2001) is also used frequently in the literature, and refers to symptoms that have no known biological/physical pathology, and are not entirely explainable as arising from a known psychological disorder (e.g., heart palpitations experienced by an individual with panic disorder would not be considered medically unexplained symptoms, Nezu et al, 2001), however they are strongly and consistently associated with emotional distress, in particular

depression and anxiety levels (see e.g., Kolk, Haniwald, Schagen & Gijsbers van Wijk, 2002). One study found of 191 new referrals to a general medical outpatient clinic, the prevalence of medically unexplained symptoms was 52% (van Hemmert, Hengeveld, Bolk, Rooijmans, & Vandenbroucke, 1993). Medically unexplained symptoms are labelled so only when they are chronic in nature, result in reduced daily activities, social behaviours and work, and although frequently patients seek help for these symptoms, conventional medical treatment is largely ineffective (Nezu et al., 2001; Wilkie & Wessely, 1994). Most patients presenting with these symptoms believe that they have physical, rather than psychological, origins (Nezu et al., 2001). This concept is clearly related to the *DSM-IV* somatisation and undifferentiated somatoform disorders.

Kellner (1985; 1987) used the term *functional somatic symptoms* to describe “somatic symptoms not caused by physical disease or tissue damage” (Kellner, 1987, p. 2719); this concept would include somatisation disorder and hypochondriasis, and also subthreshold conditions. Others describing such symptoms in general practice settings have also adopted this definition (e.g., Lidbeck, 1997; Palsson, 1988; Warwick, 1989). Wessely, Nimnuan and Sharpe (1999) use the term *functional somatic symptoms* as an umbrella term for somatisation, somatisation disorders, and unexplained medical symptoms, stating that the similarities amongst these related conditions and terms outweigh the differences.

Peters et al. (2002) speak of *persistent unexplained physical symptoms*, and Weich, Lewis & Mann (1996), use the term *somatic presenters* to describe “a type of consultation behaviour in which an individual seeks medical attention for a somatic complaint, but fails to report accompanying psychological symptoms, despite the presence of co-existing psychiatric morbidity” (p.119). It is presumed that these individuals also fail to recognise the connection between psychological distress and the somatic complaint for which they seek help (Morris & Gask, 2002; Pilowsky, 1992; Weich et al., 1996; Wilkinson & Mynors-

Wallis, 1994). They found that 25% of a sample of 301 consecutive general practice attendees met this definition, while only 4% of the same sample met the criteria for a full somatisation disorder, reinforcing the opinion expressed above, that measuring only somatisation behaviour that reaches criteria for formal psychiatric diagnoses will underestimate this problem in general practice settings (Escobar et al., 1987; Gureje et al., 1997; Richter et al., 1999).

In the face of this, Escobar and colleagues (Escobar, Burnam, Karno, Forsythe & Golding, 1987; Escobar, Waitzkin, Silver, Gara & Holman, 1998) propose the construct *abridged somatization disorder*, which is based on the presence of four unexplained physical symptoms in men, and six unexplained physical symptoms in women. Peveler et al. (1997) state that there is, however, little empirical evidence to support this arbitrary cut-off level of the number of symptoms required, and they point out that clinically, patients with even fewer symptoms may still cause significant management difficulty for general practitioners.

Kirmayer and Robbins (1991) also found a relatively high number (26%) of primary care patients were “somatically preoccupied”, but only 1% met criteria for *DSM-III-R* somatisation disorder. They propose three types of medically unexplained symptom presentations: (1) patients with multiple unexplained physical symptoms without a psychiatric disorder; (2) patients with multiple unexplained physical symptoms in association with a clear-cut psychiatric diagnosis, often a mood disorder; and, (3) patients with extreme health-related anxiety or diagnosable hypochondriasis.

Different prevalence rates for these clinical presentations occur not only because of the different definitions used; they also occur because of the method of symptom detection. Methods of detection vary according to nature of symptoms, timeframe covered, and response category, e.g., interview, questionnaire, or medical record (Kolk Haniwald,

Schagen, Gijsbers van Wijk, 2002). Relying upon interviews and questionnaires has been found to overestimate the frequency of unexplained physical symptoms, while searching through medical records may underestimate them (Kroenke, 2001). In a study of 175 primary care patients in the UK, Peveler et al. (1997) reported that GPs identified unexplained physical symptoms as the main clinical problem for 19% of patients. Screening instruments alone in the same population identified a higher estimate (35%). Twenty per cent of these patients were considered “probable cases of mood disorder”; 5% were considered probable cases of somatisation disorder; and 9% had high rates of health-related anxiety.

Escobar (1997) states that four medically unexplained symptoms for males and six for females suggests somatic preoccupation. Kroenke, Spitzer, Williams, Linzer, Hahn and deGruy (1994) found that as the number of unexplained physical symptoms reported by patients increases, the likelihood that they have a psychiatric disorder also increases. The following table demonstrates this reported increase:

**Table 1. Increase in prevalence of anxiety and depression with increasing number of medically unexplained symptoms (Kroenke et al., 1994)**

Number of medically unexplained symptoms	Prevalence of depressive disorder	Prevalence of anxiety disorder
0 – 1	2%	1%
2 – 3	12%	7%
4 – 5	23%	13%
6 – 8	44%	30%
9 +	60%	48%

The World Health Authority’s (WHO) classification system, the ICD-10, recognises that the presentation of mental illness in primary care is often different to that seen in secondary care, and offers still other classifications for somatised mental illness

presentations in general practice (WHO, 2000; Jenkins, Goldberg, Kiima & Meyeya, 2002). The *Who Primary Care Version for Mental Disorders for the 10th International Classification of Diseases (ICD-10-PHC)* lists the following relevant classifications: *unexplained somatic complaints* (F 45) and *neurasthenia* (F 48.0). The latter has been reclassified in the UK as *chronic fatigue syndrome* (Jenkins et al, 2002).

## **1.2 Health care utilisation for somatically preoccupied patients**

Barsky et al. (2001) point out that clinical observation suggests that somatising patients tend to use medical services in maladaptive and inefficient ways: frequently obtaining care from multiple providers simultaneously, failing to keep scheduled appointments, and frequently switching physicians. This leads to physician frustration and inefficient use of medical services.

### **1.2.1 GP reactions**

Research shows that doctors find somatising patients “vexing,” “taxing,” and “frustrating” to care for, with GPs referring to a feeling of “heart sink” when they know the patient has presented (Barsky, Wyshak & Latham, 1991; Kerwick, Jones, Mann & Goldberg, 1997; Lin, Katon & Von Korff, 1991; O’Dowd, 1988; Warwick, 1989). GPs express frustration because these patients present frequently (Smith, 1994); they are convinced that they are physically ill, and characteristically deny any psychosocial influences on their symptoms (Benjamin & Bridges, 1994); they resist psychiatric referral (Craig, Boardman & Mills, 1993); typically remain unreassured following a negative examination (Benjamin et al., 1993); and are typically refractory to palliative and supportive medical management (Escobar et al., 1987; Fink, 1992; Nezu et al., 2001).

Barsky et al. (2001) state that it follows that somatisation adds substantially to the overall costs of medical care.

### **1.2.2 Costs**

Of course medical practitioners must ensure that they have conducted as many medical tests as is reasonable and indicated when a patient presents with unexplained medical symptoms. It may indeed be the case that the symptoms are caused by an organic illness, and entertaining a wide range of hypotheses is critical. In other words, while underlying anxiety may be the cause of some patient's physical symptoms, disease or physical illness may be the cause of others, and when these symptoms are presumed too early to have psychological origins, the results could be grave for both doctor and patient. Nevertheless, there comes a point when a doctor can conclude that a reasonable amount of medical investigations have been conducted; continuing testing after this point has a high cost for the community and the patient.

Patients who tend to somatise have elevated rates of outpatient visits (Barsky & Klerman, 1983; Barsky et al., 1991; Barsky, Ettner, Hersh & Bates, 2001; Bass & Murphy, 1991; DeGruy, Columbia & Dickinson, 1987; Swartz, Blazer & George, 1986; Zoccolillo & Cloninger, 1986), hospitalisation (Barsky et al., 1991; Fink, 1992; Zoccolillo et al., 1986), and total health care costs (Barsky et al., 2001; Craig et al., 1993; DeGruy et al., 1987; Lipsitt, 1996; Shaw & Creed, 1991; Smith, Monson & Ray, 1986; World Health Organization, 1984), often with little clinical improvement (Craig, Boardman, Mills, Daly-Jones & Drake, 1993; Escobar et al., 1987; Kirmayer & Robbins, 1996; Von Korff, Ormel, Katon & Lin, 1992). In fact, Lipsitt (1996) and Smith et al., (1986) found that health care costs for such patients are nearly 10 times higher than for the average patient.

Swartz et al, (1991) found that patients with diagnosable somatisation disorder used three times the medical services of patients without a somatisation disorder.

In addition, as noted previously, somatising patients often present with comorbid psychiatric disorders, including personality disorders (Bardikoff, 1997; Hayward & King, 1990; Hudziak, Boffeli, Kreisman, Bataglia, Stanger & Guze, 1997; Rost, Akins, Brown & Smith, 1992), and in particular depressive and anxiety disorders (Barsky et al., 1988; Escobar et al., 1998; Kirmayer et al., 1998; Kisely et al., 1997; Kisely et al., 1996; Kolk et al., 2002; Kroenke et al., 1998; Simon et al., 1996). A large literature demonstrates elevated rates of medical utilisation by patients with depressive and anxiety disorders (e.g., Freeborn, Pope & Mullooly, 1990; Katon & Walker, 1998; Liptzin, Regier & Goldberg, 1980; Mehl-Madrona, 1998; Portegijs, van der Horst, Proot & Kraan, 1996; Simon, Von Korff & Wagner, 1993; Waxman, Carner, & Blum, 1983).

In a study involving 876 US primary care patients Barsky, et al., (2001) found that patients who rated in the highest 14% of the clinic population on scales of somatisation and hypochondriacal health anxiety sought medical care almost two times more often in the year preceding and the year following participating in the study than did the nonsomatising patients of the clinic. After adjusting for group differences in sociodemographic characteristics and medical comorbidity, these significant differences in utilisation remained. They also had a significantly greater chance of being hospitalised in the year following the study.

Barsky et al., (2001) point out that this heavy use of resources is not beneficial to somatising patients, and they not infrequently develop side effects and iatrogenic illnesses (Fink, 1992). In line with this, Barsky et al., (2001) state that their retrospective results are compatible with two different explanations: that high degrees of somatising and health anxiety lead to high health care utilisation, or alternatively that frequent medical visits



actually increase one's health anxiety and precipitate more bodily symptoms. They caution:

*"The elevated resource utilization of somatising and hypochondriacal patients may not necessarily be inappropriate, but it is at a minimum inefficient and maladaptive because their somatisation is often chronic and their symptoms, distress, and disability frequently fail to improve with medical management. Early intervention would appear to be key, because somatisation becomes more refractory once the patient has developed a stable adaptation to the sick role" (p. 712).*

Because such patients present first to general practitioners, it would seem logical that all GPs are armed with at least a basic set of skills that are derived from world's best practice in treating somatising behaviour.

### **1.3 Aetiology**

The aetiology of somatic preoccupation/ health-related anxiety is not completely clear (Richter et al., 1999). It is possible that some of the comorbid disorders that have been noted above (e.g., depression, anxiety) are causally linked, but whether primarily or secondarily is difficult to determine (Richter et al., 1999). Early developmental abuse (Polusny & Follette, 1995; Salmon & Calderbank, 1996; Weich, Lewis & Mann, 1996), personality disorders (Bardikoff, 1997; Hayward et al., 1990; Hudziak et al., 1997; Rost et al., 1992), parental style (Baker & Merskey, 1982), and substance abuse (Tien, Schlaepfer & Fisch, 1998) have all been associated with somatising behaviour.

Recent accounts suggest a complex biopsychosocial explanatory model in which individual vulnerabilities, social influences and environment, cognitive interpretations, physiology, behaviours, emotions, and medical care all interact (e.g., Barsky, 2001a; Clark, Salkovskis, Hackman, Wells, Fennell, Ludgate, Ahmad, Richards & Gelder, 1998; Craig &

Boardman, 1990; Nezu et al., 2001; Sharpe, Peveler & Mayou, 1992; Stanley, Peters, & Salmon, 2002; Wessely, Nimunuan & Sharpe, 1999).

The preceding section of this document outlined the large numbers of patients who present in primary care settings with health-related anxiety, the costs and difficulties involved in attempting to treat such patients, the heterogeneity of terminology in this area and a brief introduction to possible causes for their onset. Psychological factors posited to underlie health anxiety are considered in more detail in the following sections.

## **2. Psychological concepts underlying health-related anxiety**

Before considering the proposed aetiology for health-related anxiety, this section of the paper will explore some of the approaches to studying how individuals appraise their health generally. How we think about our health, and how we cope when we are ill, or believe we might be ill, will underlie dysfunctional levels of anxiety about health.

Health researchers have explored the impact of various mechanisms upon health and wellbeing, including studying our illness cognitions: the way that we conceptualise disease and symptoms that could indicate disease; our coping mechanisms when we believe that we may be ill; and personality traits that may influence our vulnerability to psychopathology, including health-related fears and disorders. Cognitive behavioural approaches also offer a model for understanding these behaviours. This section will review the key concepts in these areas with a view to better understanding why some of us become preoccupied with fears that we are medically ill when this appears to not be the case.

### **2.1. Illness cognitions and health-related anxiety**

When we become aware that all may not be well with our health – that we may be ill – we are forced to think about and cope with this threat. Thinking about being ill, or the possibility that we may be ill, is described in health psychology literature within the construct of illness behaviour. Mechanic (1961) developed this concept to describe the ways in which different people individually perceive, evaluate and react to symptoms. Building from this, the concepts of illness cognitions, also called illness perceptions, illness representations, illness schemata and illness beliefs, have been developed. Lacroix (1991) defined illness schemata as:

*“a distinct, meaningfully integrated cognitive structure that encompasses (a) a belief in the relatedness of a variety of physiological and psychological functions that may or may not be objectively accurate, (b) a cluster of sensations, symptoms, emotions and physical limitations in keeping with that belief, (c) a naïve theory about the mechanisms that underlie the relatedness of the elements identified in (b), and (d) implicit or explicit prescriptions for corrective action” (p.197).*

The illness perception approach relates to the patient’s experience of an illness or health-threat, and the main emphasis is on the patient’s own cognitive model of their condition. Just as people construct representations of the external world to explain and predict events, patients develop similar cognitive models of bodily changes that reflect either transient symptoms, or more long-term illness (Weinman & Petrie, 1997a). Thus, in being faced with a situation such as the experience of an unusual symptom, or the provision of a diagnosis from a doctor, individuals will construct their own representation, which, in turn, will determine their behaviour and other responses, including health-seeking behaviour and compliance with recommended treatment (Weinman & Petrie, 1997b).

Of most influence in the illness perception area is Leventhal’s self-regulatory model (e.g., Leventhal et al. 1984; 1985; 2001). Leventhal and his colleagues defined illness cognitions as a patient’s own implicit common sense beliefs about their illness. Leventhal proposed that these cognitions provide patients with a framework for coping with and understanding their illness, and alerting them to cues that they are becoming ill (Ogden, 2000). Of relevance to this study is the fact that at times we may misinterpret normal body signs and symptoms as evidence that we are becoming ill.

Leventhal and his colleagues used interviews with large groups of people with chronic illnesses to identify five dimensions of these illness perceptions, cognitions or beliefs. These include:

- Identity: This refers to the label given to the illness (the medical diagnosis or condition, or the label given to the illness by the patient) and the symptoms experienced. Illnesses can be identified by labels (e.g., arthritis), concrete signs (e.g., deformations, affected joints), and by concrete symptoms (e.g., pain, stiffness)
- The perceived cause of the illness: This dimension comprises the patient's ideas about the likely cause or causes of the conditions. These causes may be biological, or psychosocial (e.g., stress or health-related behaviour). In addition, patients may hold representations of illness that reflect a variety of different causal models (e.g., 'My cold was caused by a virus'; 'My cold was caused by being run down')
- Time line: This refers to the patient's beliefs about how long the illness will last, whether it is acute (short-term) or chronic (long-term) (e.g., 'My cold will be over in a few days')
- Consequences: This refers to a patient's perceptions of illness severity, and the possible effects of it on their life (the perceived physical, social, economic and emotional consequences)
- Curability and controllability: This reflects whether the patient believes the illness can be treated and cured, and their ideas about what they themselves, or providers of medical care can do to cure the illness

Evidence for these illness dimensions has also been found in a variety of health populations, including heart disease (Cooper, Lloyd, Weinman & Jackson, 1999; Petrie, Weinman, Sharpe & Buckley, 1996; Steed, Newman & Hardman, 1999), rheumatoid arthritis (Murphy, Dickens, Creed & Bernstein, 1999; Pimm & Weinman, 1998; Scharloo, Kaptein, Weinman, Hazes, Breedveld & Rooijmans, 1999), cancer (Buick, 1997), psoriasis

(Fortune, Richards, Main & Griffiths, 2000; Scharloo, Kaptein, Weinman, Vermeer & Rooijmans, 2000a), chronic obstructive pulmonary disease (Scharloo, Kaptein, Weinman, Vermeer & Rooijmans, 2000b), chronic fatigue syndrome (Heijmans, 1998; Moss-Morris, Petrie & Weinman, 1996), diabetes (Griva, Myers, & Newman, 2000) and Addison's disease (Heijmans, 1999), and healthy subjects rating statements or descriptions of symptoms (Ogden, 2000).

Using these dimensions, one could also imagine a physically healthy patient incorrectly and negatively interpreting a cluster of symptoms becoming highly distressed and anxious. For example, a person with cramps in their stomach could label this as evidence of a tumour (Identity), indicating cancer (Cause), that will be ongoing (Time Line), cause major disruption in their life and even their death (Consequences), and will be very difficult to treat (Curability and Controllability).

Research has found that people regulate their health-related behaviour according to these ideas within the five dimensions. In a review of studies investigating the influence of illness perceptions upon medical, psychological and behavioural outcomes in patients with chronic somatic illness, Scharloo & Kaptein (1997) found that lay people's ideas along these five dimensions guide their coping, entry into and use of medical treatment, and evaluations of treatment effects. They concluded that people's illness perceptions (especially perceived consequences and perceived control) are important factors impacting upon their medical (e.g., pain severity), psychological (e.g., depression, anxiety, self-esteem, life satisfaction) and behavioural (e.g., working time, impairment, activity levels) outcomes.

A favourable course of the chronic somatic illness in the studies reviewed seems to be associated with high scores on internal control, a belief that the illness will be intermittent or discontinuous, and a low level of perceived disability or seriousness of the illness

(Scharloo & Kaptein, 1997). It can be assumed that such thoughts are adaptive when they are realistic, or in line with an accurate perception of the severity of the illness.

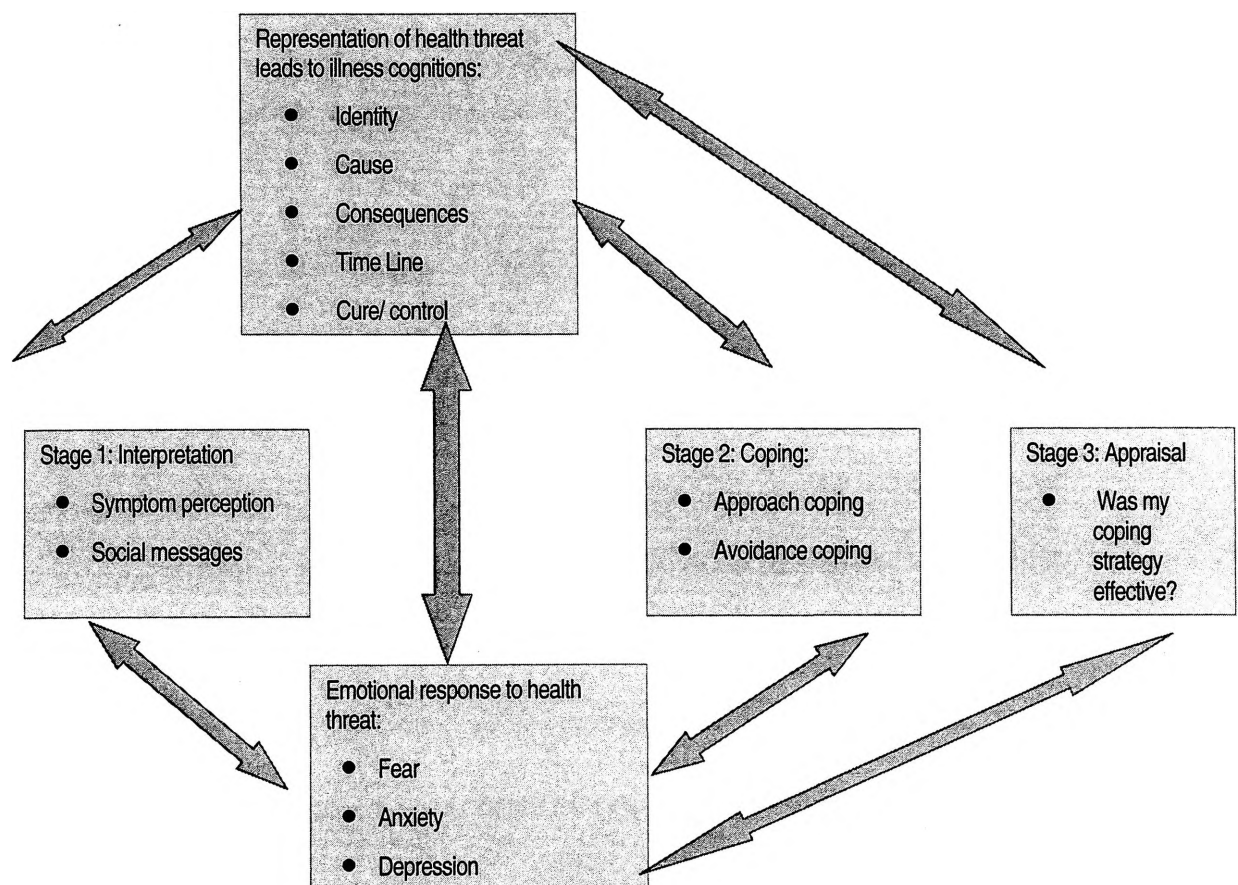
The previous author also commented on promising results from interventions aimed at altering unhelpful illness cognitions in these patients with chronic illness. One example of such a study (Jensen, Turner & Romano, 1994) found that change in a belief in oneself being disabled by pain was associated with improvement in depressive symptoms and physical functioning after multidisciplinary pain treatment. Increased belief in internal control was also associated with a decrease in number of pain-related physician visits.

It appears that individuals use these beliefs about illness to make sense of ill health, and these beliefs also form their understanding of any symptoms that they perceive developing. Leventhal and his colleagues incorporated his description of these illness cognitions into a model of illness behaviour. The model examines the relationship between an individual's cognitive representation of their illness, and their subsequent coping behaviour. This model is known as the 'self-regulatory model of illness behaviour', and is articulated further below.

### **2.1.1 Leventhal's illness behaviour model**

The assumptions underlying Leventhal's model are that people have an active information processing system that leads them to generate both a representation of illness and an emotional reaction to this illness (Scharloo & Kaptein, 1997). This processing system consists of three stages: representation, coping and appraisal. This model is based on approaches to problem solving, and suggests that individuals deal with illness or symptoms in the same way as other problems. It is assumed that given a problem or a change in the status quo, the individual will be motivated to re-establish their state of normality (Ogden, 2000). Problem solving is traditionally described as incorporating three

stages: (1) interpretation: making sense of the problem. Interpretation of a detected symptom alerts an individual to a potential illness. This can occur through two channels: symptom perception (e.g., 'I have a pain in my chest'), and social messages (e.g., 'the doctor has diagnosed this pain as angina') (Ogden, 2000); (2) coping: dealing with the problem in order to regain a state of equilibrium; and (3) appraisal: assessing how successful the coping stage has been. According to models of problem solving these three stages will continue until the coping strategies are deemed to be successful and a state of equilibrium has been attained. In terms of health and illness, if healthiness is an individual's normal state, then any onset of illness will be interpreted as a problem and the individual will be motivated to re-establish their state of health (Ogden, 2000). Figure 1, below, presents this model, depicting how illness perceptions are posited to impact upon us behaviourally (Stages 1 to 3 as described above) and emotionally.



**Figure 1. Leventhal's self-regulatory model of illness behaviour**



Leventhal's model states that individuals are motivated to minimise their health-related risks and to reduce health threats in ways consistent with their perceptions of them (Leventhal, Nerenz & Steele, 1984). That is, we want to be healthy, and the manner in which we strive to reduce threats to our health depends upon how we think about symptoms. It follows that if our illness perceptions are inaccurate, or incomplete, we may act in a manner that exacerbates the problem. For example, if a person suddenly feels breathless as a result of hyperventilation or over-breathing, and they interpret this feeling catastrophically, they will frantically seek to take more rapid breaths – the precise opposite of what will actually end the symptoms – that is, slow, calm breathing, and a reduced number of breaths.

### **Information from others: Impact upon health-behaviour**

Leventhal's model also includes that at each of the points at which we perceive information about a potential illness (termed 'symptom perception' and 'receiving social messages') a person may receive accurate, inaccurate or incomplete information. As noted above, psychosomatic anxiety arises when normal body signs and symptoms are misinterpreted as evidence of disease (e.g., Salkovskis, 1989; Salkovskis, 1996; Salkovskis & Bass, 1997; Salkovskis, Rimes, Warwick & Clark, 2002). When we seek information about these symptoms, by consulting a doctor in relation to them, we may be told that there is 'nothing wrong'. If we are simply told that there is no sign of disease, but are given no explanation for what caused the symptoms, we may still leave our doctor feeling worried and insecure, alert for other symptoms that could indicate a disease that the doctor 'missed'. Thus we may begin trying to 'cope' with an illness that is not there, on the basis of inaccurate or incomplete information. This coping might involve excessive vigilance for further 'evidence' of disease that the doctor may have missed, leading to extension and worsening of the symptoms. Alternatively, we may be given a convincing

explanation of what could have led to the symptoms, for example, stress, anxiety or worry, and may seek to reduce these states, improving the symptoms.

Information about illness also comes from other people (e.g., friends, family), and these social messages will also influence how the individual will interpret physical symptoms. Also, factors such as knowledge, previous experience and social support may influence the appraisal process. Leventhal and colleagues (e.g., 1984) state that there are three broad sources of information that people draw upon for the elaboration of their illness representations. The first is the generalised pool of illness information current within their culture (the current author's experience indicates that the Internet is an increasingly utilised source of information for patients presenting to general practitioners); the second is social communication, or information obtained in direct contact with other people; and the third is the individual's personal illness experience. According to Leventhal and colleagues, in a typical illness episode, information from all three sources is used to elaborate upon a symptom experience, and to form a particular illness representation.

Leventhal et al. (1984) state that the medical system is designed to deal with acute symptomatic conditions, and people become used to rapid diagnoses and cures of the illness. They state that bodily symptoms automatically create expectations of diagnosis, treatment and cure. One can extend Leventhal's thesis as applicable to health-related anxiety: if the doctor detects no disease, and tells the patient this, but gives no alternative explanation for the symptoms, the patient may be left wondering whether the doctor got it wrong, or that the doctor thought that their symptoms were 'all in their head'.

## **Over-focusing upon symptoms**

As indicated above, Leventhal's model is concerned with our behaviours and responses when we are confronted with a perceived health-threat, and indicates that we can respond adaptively or otherwise. We all perceive feelings in our body differently, and where we place our attention and how much we attend to these feelings also impacts upon whether we behave adaptively or not. Pennebaker (1982) argued that there are individual differences in the amount of attention people pay to their internal states: some are more focused internally, and sensitive to symptoms, and others are not. Pennebaker (1982) found that those focused internally are not necessarily more accurate in detecting internal changes: for example, they tended to over estimate changes in their heart rate compared to those who were externally focused.

In addition, Kolk et al. (2002) state that various other factors affect our detection of somatic sensations, including an underload or overload of information from the environment, negative emotion, and a tendency to selectively attend to bodily cues. Kolk et al. (2002) define underload of environmental information as including social isolation, unemployment, or undemanding, low-status jobs; and overload of environmental stimulation as including over-demanding work or family and household responsibilities, as well as conflicts due to multiple roles. These external stressors have been found to result in negative health effects (De Rijk, Schreurs, & Bensing, 1999; Gijsbers van Wijk, Kolk, van den Bosch, & van den Hoogen, 1995; Pennebaker, 1982). Negative affect or emotion has been associated with reporting of physical sensations and symptoms, independent of other health behaviours (e.g., Deary, Scott & Wilson, 1997; Vassend, 1994; Watson & Pennebaker, 1989), and individual differences in selective attention to the body has been associated with elevated symptom reporting as well (Barsky, 1992; Barsky, Goodson, Lane & Cleary, 1988; Miller, Murphy & Buss, 1981; Pennebaker & Skelton, 1981; Shields,

Mallory & Simon, 1989). Whether these detected somatic sensations are subsequently labelled as physical symptoms of illness depends upon their interpretation. Patients with medically unexplained symptoms often tend to make disease-related attributions for common somatic sensations (Robbins & Kirmayer, 1991).

### **Illness perceptions and emotions**

Leventhal's model concerns the way that illness perceptions affect behaviour, as discussed above, and how they affect emotions. This section considers this part of the model in more detail.

Identification of an illness (whether real or perceived) will result in changes in emotional state, for example, increased anxiety. According to Leventhal et al. (1984) there are a variety of ways in which emotion can alter response to illness. First, it can influence coping by altering the amount of energy available for action and by interfering with the organisation of coping. Second, emotion can increase or decrease the intensity of illness symptoms and generate symptoms that can be confused with those of the illness. They point out, as summarised in the preceding section, that increases in emotional distress have repeatedly been found to be related to increasing use of medical care. They state that emotions also play a critical role in determining the sequence in which people scan or inspect the features of an illness representation. Negative affect may make the person constantly think about possible grave consequences. This will also constantly elicit cognitive content that reinforces the initial depressive emotion. In addition, as mentioned previously, increased anxiety will result in increased physiological symptoms, which may then be interpreted as further evidence of illness, leading to further vigilance and anxiety (e.g., Salkovskis, 1996; Salkovskis & Bass, 1997; Salkovskis et al., 2002).

### **2.1.2 Consideration of illness perceptions in general practice presenters**

Understanding patients' illness representations is compatible with the emerging view of health care that sees the patient taking a more active and informed role in their treatment (Weinman & Petrie, 1997). Patients are now requesting a more collaborative relationship in which their beliefs and expectations are acknowledged in consultations and treatment. The GP should therefore be well-equipped to identify and discuss thoughts about symptoms, particularly when the patient has a distorted or inaccurate view of the symptoms: "Early exploration and identification of patients' perceptions offers the opportunity of minimising or avoiding later difficulties such as nonadherence to treatment or recommended behaviour changes" (Weinman & Petrie, 1997, p. 114).

Although such recommendations have been made, there is evidence that the way people think about and interpret their illness is typically not given significant attention in medical settings. For instance, Brown, Dunbar-Jacob, Palenchar, Kelleher, Bruehlman, Sereika, and Thase (2001) state that little attention has been paid to the role of the depressed person's illness cognitions in coping with their depression. They state that research into why some patients readily engage in depression self-management and others do not is limited, and posit that illness perceptions may have a role in these differing behavioural outcomes. They hypothesised that perhaps some depressed patients do not believe that their symptoms and impairment are related to depression, or that they can be improved with treatment. They point out that the fact that depression frequently accompanies chronic physical illness, and this fact may contribute to a misinterpretation of depressive symptoms by some patients. They add that it is also possible that even when the symptoms are recognised as depression-related, patients may not understand the seriousness of the disorder, its clinical course and impact on functioning, and amenability to treatment. Their study of forty-one primary care patients suffering depression found

that depression symptoms were described as frequently co-occurring with physical symptoms such as pain, gastro-intestinal distress, and to a lesser extent with autonomic arousal symptoms. They found that illness cognitions for depression were significantly correlated with coping strategies, even when the level of depression was controlled.

Although the previous study relates to depression, rather than health-related anxiety conditions per se, the authors' findings are relevant to the latter, in that they confirm the role that illness cognitions play in health-related behaviours, such as coping styles, which in turn can ameliorate or exacerbate the condition, and in this respect the findings are also in line with Leventhal's model discussed earlier.

## **2.2 Stress, coping behaviours and health-related anxiety**

Leventhal's model, and the illness cognition literature and research that follows it, has demonstrated that the way we think about physical symptoms impacts our emotional response and our coping behaviours in response to the symptoms. In turn, our emotional response and the way we behave or cope in the face of a health-threat can impact the physical symptoms or course of the illness. This interaction can have a positive or a negative effect upon the symptoms. Such a model is in line with cognitive behavioural and biopsychosocial models of health-related anxiety (discussed further subsequently); the following section delineates that the coping literature (studies of how humans cope with stress and threat) also approaches similar conclusions from a behavioural/ coping perspective.

### **2.2.1 Stress and coping**

Why some people become physically or psychologically ill in the face of stress, or perceived stress, and others do not, has for many years been the subject of intensive research and enquiry. In fact, how we cope with stress is arguably one of the most frequently studied concepts in the behavioral sciences (Penley, Tomaka, & Wiebe, 2002); coping is currently being studied as a reaction, strategy, tactic, behavior and cognition (Schwarzer & Schwarzer, 1996), and is discussed under such topics as coping function, style and resource (Ben-Zur, 2002). Beasley, Thompson & Davidson (2003) comment that many studies report that stressful life events precipitate ill health and psychological dysfunction. However, how much of a direct influence adversity has on psychological or physical health is still hotly debated. It is clear that some individuals experience a high level of life stress without their physical or psychological health being compromised. Nowack (1989) suggests that coping style and cognitive hardiness are protective mechanisms in the face of exposure to adversity.

How we respond to stress affects our response to illness (Evans, 1998), and we all respond to stress differently, necessitating an interactionist definition of stress. Such a definition emphasises the importance of our perception of the demand, with this perception crucial to coping, or failing to cope, with the potential stressor (Evans, 1998).

In line with the above, Evans (1998) states that stress is the outcome of a cognitive process in which a challenge or threat is perceived, the ability to control it is assessed, and if a discrepancy arises with the perceived ability to control or cope with the threat, helplessness, or lack of control is registered. This follows Lazarus (e.g., 1966, Lazarus & Folkman, 1984) who argued that stress consists of three processes: primary appraisal: the process of perceiving a threat to oneself; secondary appraisal: the process of bringing to mind a potential response to the threat; and coping: the process of executing that

response. Lazarus emphasises that these do not necessarily occur in a linear manner. Rather, an outcome of one process may reinvoke a preceding process. For instance, realising that an adequate coping response is readily available may cause one to reappraise a threat as less threatening (Carver, Scheier & Weintraub, 1989). If however, in line with Seligman's (1975) work on helplessness, when an organism perceives that they have a lack of control over events, or do not have an efficient coping response, stress-related and depression-like symptoms may result. Importantly, and this is one of the underpinning principles of cognitive behaviour therapy, this perception of lack of control, or helplessness, can be reality-based or not. As Evans (1998) points out, the amount of control a person actually has is unimportant; it is how much control that we believe that we have that really matters.

### **2.2.2 Coping with health-related anxiety**

People experiencing normal body sensations that they interpret as being evidence of pathology will register threat, even if this perception is unfounded. If they approach their GP with these symptoms, and the GP finds and reports no pathology, most people will likely feel immediate relief, and leave the surgery reassured. For some people, however, if the symptoms persist, and they can find no explanation for them, a perception of lack of control, or helplessness, may register and persist, increasing the symptoms. One of the aims of the current research will be to increase such patients' feelings of control by teaching their GP to impart a meaningful explanation for the symptoms, and teach a strategy to reduce or remove them.

Animal research has shown us that perceived controllability reduces the negative physiological impact of stress (e.g., Weiss, 1977). Most humans also prefer control to not being able to predict the outcome of a demanding situation, even in experiments where a



predictable stimulus is more aversive than an unpredictable stimulus (Evans, 1998). However this is not always the case – some of us would prefer to avoid knowing the outcome, would prefer to distract ourselves, even when monitoring for negative events could prevent them occurring (Evans, 1998). Such behaviour would be classified as an avoidant coping style.

### **2.2.3 Are there such things as coping styles or traits?**

Researchers studying coping in the face of stressful events disagree about whether there is such a thing as a ‘coping style’, or whether it is only ever the case that different contexts elicit different coping strategies. Penley et al. (2002) summarises that some authors in the field have taken a trait approach, defining coping as habitual problem-solving thoughts and actions, while others have taken a process approach (e.g., Folkman & Lazarus, 1985; Moos & Billings, 1982; Pearlin & Schooler, 1978). They state that authors working from a process approach to coping argue that the way that a person generally responds to stress may tell us very little about how they will cope with a specific stressful event. From this perspective, it depends upon the situation, and individual factors.

The Lazarus-Folkman approach (e.g., Folkman & Lazarus, 1980; Lazarus & Folkman, 1987) defines coping as constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person (Lazarus, 1989). The key features of this approach include:

- An emphasis on thoughts and actions that have taken place in specific stressful encounters
- Context: the measurement is not in regard to what the person usually does, but what actually happened in a particular context

- Process-centred: It is assumed that how one copes changes with time or context (it is a process)
- Transactional: Coping is seen as a result of the active interplay between person (including their psychological interpretation) and environment

One particular coping process is not considered necessarily good or bad, because this depends upon the person, their goals and beliefs, the type or stage of the stressful encounter, and the outcome of concern (e.g., subjective well-being, social functioning or somatic health).

Lazarus-Folkman do not consider it fruitful to search for types of copers or coping that are more helpful than others, stating any given coping process may have favourable or unfavourable results depending on who uses it, when, and what outcome you're looking at (Lazarus, 1989).

Carver et al. (1989) state that although Folkman & Lazarus (e.g., 1980; 1985) "have repeatedly emphasised that coping should be thought of as a dynamic process that shifts in nature from stage to stage of a stressful transaction" (p.270), it is still possible that preferred ways of coping extend from certain personality styles/dimensions, that is, perhaps certain personality characteristics predispose people to cope in certain ways when they confront adversity. Carver & Scheier (1994) state, "Although we agree that coping can change from moment to moment, there is also some merit in the argument that people develop habitual ways of dealing with stress and that these habits or coping styles can influence their reactions in new situations" (p.185).

Carver et al. (1989) argue that individual differences or different personality traits could result in a pattern of coping over time. They state that there are three questions to consider here:

- Do people have preferred coping strategies that they use relatively consistently across a range of situations?
- Do these coping preferences relate in a systematic way to personality variables?
- Do dispositionally preferred coping strategies exert an influence on specific coping responses?

In their 1989 article, Carver and colleagues found that active (problem-focused) coping was positively associated with the personality traits of self-esteem, Type A behaviours and hardiness, and was inversely associated with trait anxiety. They also found that the COPE denial and behavioural disengagement (avoidance-focused) scales displayed essentially the opposite pattern of associations. That is, they were positively correlated with trait anxiety; and negatively correlated with optimism; the feeling of generally being able to do something about stressful situations; self-esteem; and hardiness.

Watson & Hubbard (1996) tested coping dispositions within the framework of the five-factor model of personality, revealing that neuroticism is associated with passive and ineffective coping mechanisms, conscientiousness with active problem-focused coping, and extraversion with support strategies and positive reinterpretation.

#### **2.2.4 Problem-focused versus emotion-focused and avoidant coping**

In their Ways of Coping Questionnaire Folkman & Lazarus (1998) implanted a distinction between two types of coping: problem-focused, and emotion-focused coping. This division is referred to throughout the coping literature. Ben-Zur (2002) summarises that problem-focused coping includes various actions aimed at managing future danger or threat, expressed in the efforts the person invests in order to actually change his/her

interaction with the environment. Emotion focused coping, in contrast, is aimed at reducing, preventing or tolerating the emotional and bodily reactions that are characterised as stressful.

Although most stressors typically elicit both types of coping, problem-focused coping tends to exist when people feel that something constructive can be done, and emotion-focused tends to predominate when people feel that the stressor is something that must be endured (Folkman & Lazarus, 1980).

In a meta-analytic review that examined associations between coping strategies and physical and psychological health outcomes in non-clinical adult populations, Penley et al (2002) found that problem-focused coping was positively correlated with overall health outcomes, whereas confrontive coping, distancing, self-control, seeking social support, accepting responsibility, avoidance and wishful thinking were each negatively correlated with overall health outcomes.

Beasley, Thompson and Davidson (2003) investigated the effects of coping style and cognitive hardiness, combined with life event stress and traumatic life experiences, upon general health, somatisation, anxiety and depression. Their subjects were mature age university students. They found cognitive hardiness, emotion-focused coping, avoidant coping and negative life events all directly impact on measures of psychological and somatic distress. They state that this finding supports other studies that have identified similar main effects (e.g. Higgins & Endler, 1995; Sharpley & Yardley, 1999; Wilkinson Walford, & Espnes, 2000).

They found that emotion-oriented coping had a consistent direct role in elevating somatisation, anxiety and depression scores, and in elevating scores of measures of general and psychological health, irrespective of the occurrence of negative life events.

The authors conclude that the results of this study are consistent with emotion-oriented coping being viewed as an avoidance style of coping, in that all direct effects involving emotion-oriented coping were associated with elevated scores on measures of distress. They found, however, that distraction-oriented coping lowered somatic scores for females, indicating that in some situations, avoidance approaches have beneficial effects. For some people, it may be that relinquishing control reduces their total stress (Evans, 1998).

Ben-Zur (1999; 2002) found that a problem/ accommodation-focused coping approach was positively related to positive affect, and that avoidance/ disengagement was negatively related to positive affect, and concluded that coping is directly related to affect. The author states that the results suggest that dispositional problem-focused coping strategies may be an important determinant in the affective aspects of general well-being, possibly influencing positive affect through several channels.

Lazarus (1989) states that the central questions in studying coping include:

- Which forms of coping, in which persons, and under which conditions results in positive and negative short- and long-term adaptational outcomes, and,
- Can we teach people to abandon dysfunctional forms of coping in favour of functional ones?

Lazarus (1989) states that when a person makes an effort to cope with a potential stressor in themselves or their environment by making distorted appraisals and inappropriate coping processes, there is a “disconnection” between the “components of the mind” that should be enlisted for adaptive functioning. Therapeutic approaches to address inadequate coping, he states, must address cognition, emotion, the environment and actions, or behaviours: the aim of cognitive behaviour therapy.

## 2.3 Personality and health-related anxiety

The way that we respond to a potential health threat will also be moderated by the way that we habitually respond to our environment, our personality disposition, and the presence of any psychopathology. There is considerable evidence that personality traits influence life experiences, and are relatively stable during adulthood and the later years (Harris & Clancy-Dollinger, 2003). This section of this work introduces research about personality and psychopathology, with a view to investigating how personality factors could contribute to the development or maintenance of health-related anxiety conditions.

### 2.3.1 The Five Factor Model of personality

The Five Factor Model of personality is put forward to represent the broad constellation of personality traits (Costa & McCrae, 1992). The five personality trait domains composing the five factor model are neuroticism, extraversion, openness-to-experience, agreeableness, and conscientiousness. As conceptualised by Costa and McCrae (1992), each of these five broader personality trait domains consist of six lower-order, correlated traits or facets. These traits and facets were derived from normal, non-clinical samples, but have now been applied with psychiatric patients (see e.g. Bagby, Bindseil, Schuller, Rector, Young, & Cooke 1997; Cox, Borger, Asmundson, & Taylor, 2000).

According to the five-factor model, *Neuroticism* encompasses the predisposition to experience negative affectivity such as anxiety, depression, anger, guilt, and disgust. *Extraversion* includes sociability, cheerfulness and liveliness. *Openness* to experience consists of aesthetic sensitivity, intellectual curiosity, and need for variety. *Agreeableness* incorporates trust, altruism, and sympathy, and *Conscientiousness* includes a strict adherence to principles and a desire to achieve goals (Costa & McCrae, 1992). The *NEO PI-R*

(Costa & McCrae, 1992) was developed to assess the five-factor model, including the broad domains and the six lower-order facets for each of the five domains.

### **2.3.2 Personality, psychopathology and adjustment**

Recent investigations have found these facet level traits to be particularly useful in characterising various forms of psychopathology (Bagby, Young, Schuller, Bindseil, Cooke, & Dickens, 1996; Cox, et al., 2000; Reynolds & Clark, 2001). The relationship between personality and psychopathology is conceptually complex, and different models have been posited to try to explain the possible links. One such model, the predispositional model, posits that personality traits both contribute to the onset of a psychiatric disorder (vulnerability); and also influence the course and symptom expression of the disorder (Rector, Hood, Richter & Bagby, 2002).

There is also evidence that personality traits such as neuroticism are relevant for understanding individual differences in psychological adjustment to our environment (McCrae & Costa, 1990). High neuroticism is associated with ineffective coping skills and life dissatisfaction (Costa & McCrae, 1980; McCrae & Costa, 1986), and stress vulnerability (Vandergeest, 2001). High neuroticism and low agreeableness during childhood are related to relationship problems and career difficulties (Caspi, Elder, & Bem, 1987), and together, are useful in predicting anxiety disorders (Trull & Sher, 1994). Additionally, McCrae and Costa (1990) reported that individuals experiencing a “midlife crisis” exhibited high neuroticism a decade earlier.

Various personality factors have also been found to be predictors of medically unexplained symptoms, and illnesses with strong psychological correlates, like chronic fatigue syndrome (Buckley, MacHale, Cavanagh, Sharpe, Deary & Lawrie, 1999; Russo, Katon, Lin & von Korff, 1997). For example, Buckley et al., (1999) found higher levels of

neuroticism and lower levels of extraversion than in the general population among CFS patients. The aetiology of chronic fatigue syndrome (CFS) remains controversial and unclear, although most researchers would acknowledge the role of psychological distress in the severity of the condition (discussed further subsequently), and for this reason studies relating to CFS and its treatment have been reviewed in this work as they may contribute to knowledge about health-related anxiety conditions generally.

## **2.4 A cognitive behavioural conception of health-related anxiety**

Section 2 of this work has been concerned with investigating theoretical approaches that explore factors that could play a role in the onset and or maintenance of health-related anxiety symptoms. In particular illness perceptions, coping styles, and emotions have been presented. The following section presents an overview of cognitive behaviour theory, a school of thought with different historical underpinnings to those previously explored, but with increasing convergence in terms of underlying processes studied; namely emotions, behaviours, and thoughts, and their impact upon physiology.

Cognitive behavioural approaches assert that psychological responses include an interaction between subjective (thoughts and emotions), behavioural and physiological responses (Lang, 1970), and that cognitive and behavioural interventions can therefore have an effect upon physiology. Cognitive behavioural theory could be seen as a convergence of the models previously presented, in that it is concerned with the combined impact of cognitions (in this case comparable to illness perceptions), behaviours (including coping styles), and emotions (which have been strongly associated with personality, adjustment and psychopathology).

As previewed earlier, a cognitive behavioural conception of health anxiety (e.g., Clark, Salkovskis, Ost, Breitholtz, Koehler, Westling, Jeavons & Gelder, 1997; Nezu et al., 2001;



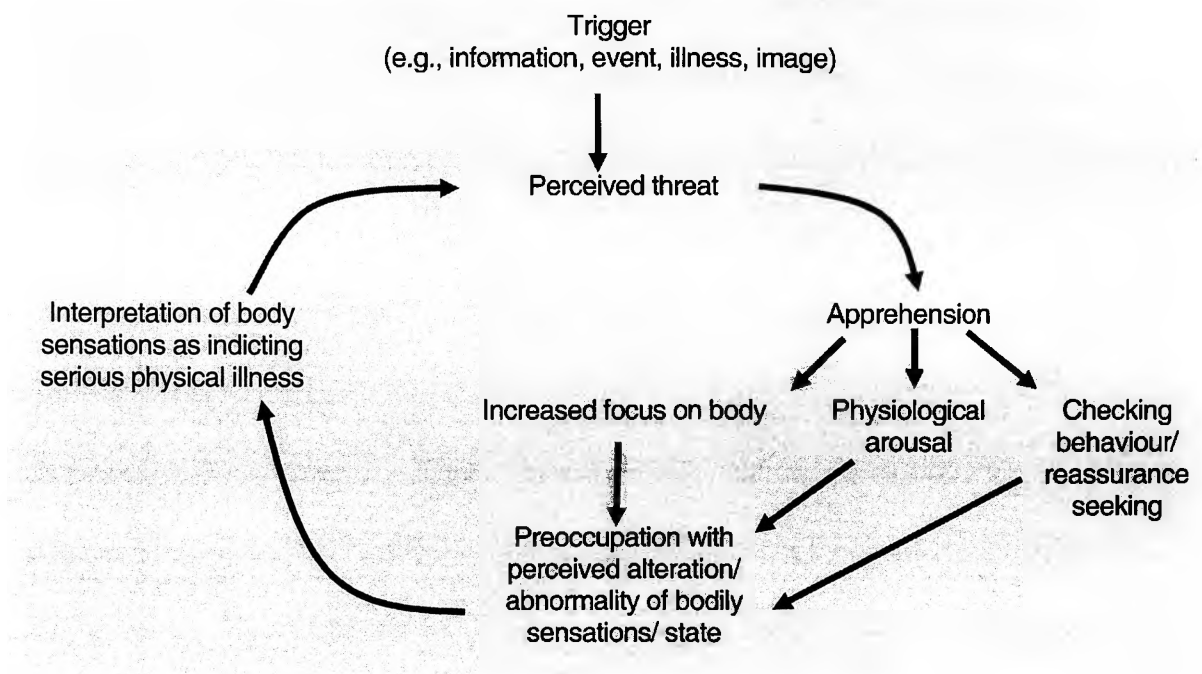
Salkovskis, 1989; Salkovskis, 1996; Salkovskis & Bass, 1997; Salkovskis & Warwick, 1986; Sharpe et al., 1992; Warwick, 1989) posits that perception of a threat (e.g., a health threat, or an unfamiliar physical symptom) triggers increased physiological arousal, which is accompanied by additional physiological symptoms as the nervous system responds to the perceived threat. The individual then narrows their attention upon their body, seeking confirmation or evidence of further threat, and typically seeks reassurance from their doctor, their social environment, or other sources of information. Often this reassurance temporarily reduces feelings of anxiety, but when the symptoms resume and the individual cannot find an adequate explanation for their symptoms, they may become preoccupied with monitoring their body for signs of illness. Often normal body sensations are misinterpreted as evidence of disease, which then results in increased anxiety and associated physiological arousal. The cycle then continues, with operant and classical conditioning learning paradigms maintaining anxiety over the long-term.

Patients experiencing health-related anxiety are constantly worried that innocuous physical sensations are actually signs of a disease that will be chronic and severe (e.g., cancer, heart disease). Faulty beliefs about these illnesses and about health in general are developed, which might originate from comments made by others, their own selective attention to information they pick up in their environment, or information relayed to them by well meaning doctors and other health professionals. Catastrophic thinking is common (e.g., *this pain in my stomach is probably a tumour*), and if their doctor fails to find a physical reason for their symptoms, such individuals take it upon themselves to continually scan for changes that may indicate that the doctor has missed evidence to make the correct diagnosis.

Such individuals typically then develop dysfunctional behaviours like repeated reassurance seeking and avoidant coping styles. Reducing physical activity, for example, may occur

because the patient reasons that this may reduce their symptoms (e.g., they notice that when they do not go out they do not experience chest pain or shortness of breath). Decreased mobility, however, can then lead to further physical changes (e.g., decreased muscle strength and cardiovascular endurance), which may then increase adverse reactions when physical activity is eventually attempted (Nezu et al., 2001; Petrie et al., 1995). Seeking reassurance repeatedly from their GP in the form of medical tests offsets anxiety in the short-term, but effectively maintains it in the long-term. The tests, even when negative, reinforce the somatising patient's maladaptive beliefs that all physical symptoms must indicate organic pathology (Allen, Woolfolk, Lehrer, Gara & Escobar, 2001).

Hypochondriasis is a diagnosable psychiatric disorder typifying the most extreme presentation of somatising behaviour, and Salkovskis (1996) and colleagues (e.g., 1997; 2002) believe that hypochondriasis is best conceptualised as an extreme form of health anxiety. They use cognitive behavioural theory to explain that individuals experience this particularly severe and persistent health anxiety because “they have an enduring tendency to misinterpret bodily variations, and other ambiguous health-related information (including the results of medical consultations and tests) as indicating that they may be suffering from a serious physical illness. Such misinterpretation can also involve perceiving the consequences of developing a physical illness as being particularly serious” (Salkovskis, 2002, p. 844). Figure 2 (see e.g., Salkovskis, 1989; Warwick, 1989) is one way of summarising the cognitive behavioural formulation of health-related anxiety.



**Figure 2. Cognitive Behavioural Model of Health Anxiety**

## **2.5 Summary of information presented to date**

The previous two sections have reviewed literature relating to the existence and possible underpinnings of health-related anxiety conditions. Section 1 highlighted that many patients present in primary care settings with symptoms that cannot be explained by medical pathology, and that these patients are often difficult to treat, are expensive to the community, and are often left feeling less reassured and more anxious by the medical interventions they increasingly seek out. Section 1 pointed to terminological difficulties when studying such patients: although there are clearly defined psychiatric disorders for people suffering extreme forms of health-related anxiety (e.g., hypochondriasis), many patients presenting in general practice do not meet full criteria for these conditions and yet still pose considerable difficulties for the GP. Labels for such problems abound in the literature (e.g., persistent unexplained physical symptoms; functional somatic symptoms; somatically preoccupied patients; somatic presenters; abridged somatisation disorder).

This paper refers widely to such problems as health-related anxiety – a distorted or irrational (but not delusional) preoccupation that one is physically ill when there is no evidence that this is the case. There is a deliberate strategy taken of being inclusive in this definition rather than referring to specific diagnoses in order to consider such patients as they would typically present in a general practice setting.

Section 2 explored the interactive role of thoughts, behaviours, emotions, and personality predispositions upon the development and maintenance of health-related anxiety. Studies and models were reviewed from health psychology (illness perceptions or cognitions), coping literature, personality theory and cognitive behavioural theory, with the aim of demonstrating that a converging literature exists indicating a biopsychosocial/interactionist theory best explains the development and maintenance of health-related anxiety.

## **2.6 An introduction to the studies that follow**

Three connected studies follow that aim to further clarify the nature of health-related anxiety, and in particular to instruct GPs in better management of such patients. Study 1 comprises the collection of baseline characteristics of sample of such patients presenting in general practice. In particular information is collected about the factors that possibly underlie health related anxiety, including illness perception, coping styles, levels of psychopathology and personality traits. Study 2 measures the outcome of a cognitive behavioural training program designed to help GPs manage such patients more effectively, with the investigation in this study focusing upon GP knowledge and confidence in such skills after training. Study 3 is a randomised control trial comparing a group of GPs who have been trained with those who have not, although in this study their patients are evaluated in order to determine whether there is any change as a result of

the training program upon key baseline measures collected in Study 1. The following figure presents a graphic summary of these studies.

Study 1	Study 2	Study 3
Baseline assessment of patients presenting to GP with anxiety about physical symptoms with no detectable organic origins. Assessment includes illness perceptions, personality traits, psychopathology levels (anxiety, depression, somatisation), and coping styles.	Evaluation of a CBT training program for GPs targeting management of health-related anxiety: Changes in knowledge and confidence of key cognitive behavioural concepts and skills are measured	Randomised control trial: Patients of GPs who have been trained are compared to patients whose who have not been trained. Illness perceptions, coping styles and levels of psychopathology are measured and compared.

**Figure 3. Summary of the studies to follow**

### **3. Study One: Psychological variables related to health-related anxiety**

#### **3.1 Aims**

There are three main aims for this study:

- i. To investigate the type and severity of psychopathological presentations of a group of patients presenting to GPs concerned about physical symptoms for which no medical pathology is detected. Further, to establish whether this group of patients differs in a clinically significant way from 'normals' or non-clinical groups; that is, whether this sample represents a 'somatising' or health-related anxiety sample.
- ii. To comprehensively investigate whether psychological factors including ill-founded illness cognitions, unhelpful personality traits, and ineffective coping styles are detected amongst this group of apparently physically healthy patients.
- iii. Finally, to investigate whether coping styles, personality variables, and/or illness cognitions can predict the nature and severity of psychopathology (anxiety, depression and somatisation symptoms) in this sample.

#### **3.2 Method**

##### **3.2.1 Subjects**

Patients who presented to a group of participating GPs complaining of physical symptoms that the GP considered could be consistent with health-related anxiety were asked to participate in this study. Participating GPs were asked to recruit between one and three patients who presented with symptoms that could be accounted for by anxiety

(standard medical tests ruled out any obvious organic pathology that could have given rise to the symptoms). Sixty-six patients were recruited for in this phase of the study. The average age of patients was 42 years (range: 18 – 73 years). Forty patients were female and 21 were male. Five participants did not list their age or sex when completing the questionnaires.

Participating GPs were recruited via advertisements placed in professional publications and notification of the study through The Royal Australian College of General Practice (RACGP) Queensland Faculty and various QLD Divisions of General Practice. As part of their participation in the study GPs were offered a free training program which attracted professional development points (45 RACGP continuing medical education points). There was no funding for the study. Further details regarding recruitment of the GPs and the training program offered is presented in Study 2.

### **3.2.2 Measures**

Patients completed the following questionnaires. These inventories are discussed further below. Copies of the questionnaires form Appendix A.

- **The Illness Perception Questionnaire (IPQ-R)** *The Illness Perception Questionnaire-Revised (IPQ-R*; Moss-Morris, et al., 2002) was designed to provide a systematic method for assessing cognitive representations of illness that was less time consuming than structured interviews. The dimensions of the IPQ-R are rated on a 5-point Likert scale: strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree. The total number of items in this section of the questionnaire is 50. Moss Morris et al., (2002) report that all subscales show good internal reliability, and that the measure has acceptable test-retest reliability over

three weeks and six months (Pearson's correlations generally ranging between 0.5 and 0.88 for each subscale). A copy of the *IPQ-R* is located in Appendix A; some further detail of its subscales is located in Appendix B.

- **The COPE Scale** The *COPE Scale* (Carver, Scheier & Weintraub, 1989) incorporates 13 conceptually distinct scales, based on theoretical arguments about functional and potentially less functional properties of coping strategies. Some scales were also included because previous research indicated that they many facilitate or impede functioning. Respondents select answers based on a four point scale: from 'not at all' (1) to 'a lot' (4); they answered indicating their 'usual response when [they] are under a lot of stress' (thus this questionnaire was used as a dispositional measure). Carver et al., (1989) reported alpha reliabilities for subscales all above 0.6 with the exception of one subscale (mental disengagement: 0.45). As reviewed in Section 2, three main types of coping meta-strategies have been identified in the literature: Problem/ Accommodation, Support/ Emotion and Avoidance/ Disengagement. For the purposes of the current study the 13 COPE scales were subsumed under the 3 factors derived by Ben Zur (2002), which were then subjected to analyses. A copy of the *COPE Scale* is located in Appendix A, and further detail about the scale is located in Appendix B.
- **NEO-Five Factor Inventory (NEO-FFI)** The *NEO PI-R* (Costa & McCrae, 1992) was developed to assess the five-factor model of personality. According to the five-factor model, *Neuroticism* encompasses the predisposition to experience negative affectivity such as anxiety, depression, anger, guilt, and disgust. *Extraversion* includes sociability, cheerfulness and liveliness. *Openness* to experience consists of aesthetic sensitivity, intellectual curiosity, and need for variety. *Agreeableness* incorporates trust, altruism, and sympathy, and *Conscientiousness*



includes a strict adherence to principles and a desire to achieve goals (Costa & McCrae, 1992). The *NEO-Five Factor Inventory* (*NEO-FFI*; Costa & McCrae, 1989, 1992) is an abbreviated form of the *NEO-PI-R*, and was used to assess personality traits in patients involved in this study. The *NEO-FFI* consists of 60 items (each of the five factors of personality is assessed by 12 items). The five scales of the *NEO-FFI* have acceptable reliability, as well as convergent and discriminant validity (0.56–0.62) compared to the scales of the *NEO-PI-R* (Harris & Dollinger, 2003). Internal consistency reliability for adult self-report has ranged from 0.68 to 0.86, and the alpha coefficients for spousal ratings range from 0.76 to 0.90 (Costa & McCrae, 1992).

- **The Brief Symptom Inventory (BSI)** The *BSI* (Derogatis, 2000) is a relatively brief (i.e., 18 item) self-report symptom inventory designed to serve as a screen for psychological distress and psychiatric disorders in medical and community populations. It is derived and related to the *Symptom Checklist 90-Revised* (*SCL-90-R*; Derogatis, 1994), and its aim is “to have maximum sensitivity to psychological distress as it actually presents in community and primary care populations” (Derogatis, 2000, p.2). The symptom dimensions of the BSI 18 are Somatisation, Depression and Anxiety, with a Global Severity Index (GSI) made up of total scores across the dimensions. The Global Severity Index of the *BSI* provides an overall measure of mood symptoms, and scores above published norms indicate a probable mood disorder (Derogatis, 2000), with respondents showing a Global Symptom Index (GSI) T score of 63 or higher (when compared to community norms), considered psychiatric “caseness” (Derogatis, 2000, p.23). Internal consistency reliability estimates (coefficient alpha) of the *BSI* range from 0.74 to 0.89. Convergence validity with the *SCL-90-R* and *BSI* is very high – between

0.91 and 0.96 depending upon the dimension. Convergent-discriminant validity and predictive validity for the latter tests are also very good (Derogatis, 2000).

### 3.2.3 Procedure

Patients who met the initial above criteria were given a coded questionnaire kit by their GP, which explained the project and asked for their consent to participate. The patient information sheet and consent form can be found in Appendix C. Patients were then given routine physical tests that the GP considered appropriate to their presenting problem to rule out organic pathology accounting for their symptoms. When the test found evidence of physical disease or illness that could have given rise to the physical symptoms, the patient was excluded from the study.

Patients who consented to participate in the study completed the questionnaires and returned them to the examiner in a pre-paid envelope.

### 3.2.4 Analyses

- **Profile of patients in current study:** Mean results of questionnaires used during the current study were compared, when available, to published results of other clinical and normative populations. In order to compare means, the standard error and upper and lower 95% confidence intervals around the mean was calculated. In order to compare means, the standard error and upper and lower 95% confidence intervals around the mean was calculated. The following formula was used to calculate the standard error (see Welkowitz, Ewen & Cohen, 1976):

$$s_x = \frac{sd}{\sqrt{N}}$$

**Predicting patient distress levels:** Multiple regression analyses were used to determine whether personality, coping styles or illness perception measures could predict the distress levels of patients presenting to their GP (as measured by responses on the *BSI*). These analyses were completed in two steps:

1. The dependent variable (Depression, Anxiety, Somatisation) was correlated (Pearson Correlation) with its potential predictors in the personality (Neuroticism, Extraversion, Openness, Agreeableness, Conscientiousness), illness perception (*IPQ*-R Consequences, *IPQ*-R Personal Control, *IPQ*-R Treatment Control, *IPQ*-R Emotional Representations, *IPQ*-R Illness Coherence), coping (Problem-Focused Coping, Emotion-Focused Coping, Avoidance-Disengagement Coping), and demographic domains (age, gender). For variables where the literature indicated a clear hypothesised relationship direction one-tailed significance was used ( $\alpha=0.05$ ). For variables where direction of relationship was equivocal, two-tailed significance was selected ( $\alpha=0.01$ ).
2. Significantly correlated variables were then included in an hierarchical regression analysis to determine the best predictors of emotional distress. Separate regressions were performed for each of the three psychopathology variables: anxiety, somatisation, and depression. Because Neuroticism could be considered a confounding variable, especially in relation to depression and anxiety, each regression analysis was initially conducted using Neuroticism only, and then re-run including Neuroticism and the other correlated variables.

### 3.3. Results: Study One

#### 3.3.1 Profile of patients

This section reports whether this group of general practice patients differ from non-clinical populations in terms of personality functioning, psychopathology (depression, anxiety, and somatisation levels), coping styles, and illness perceptions.

#### Personality

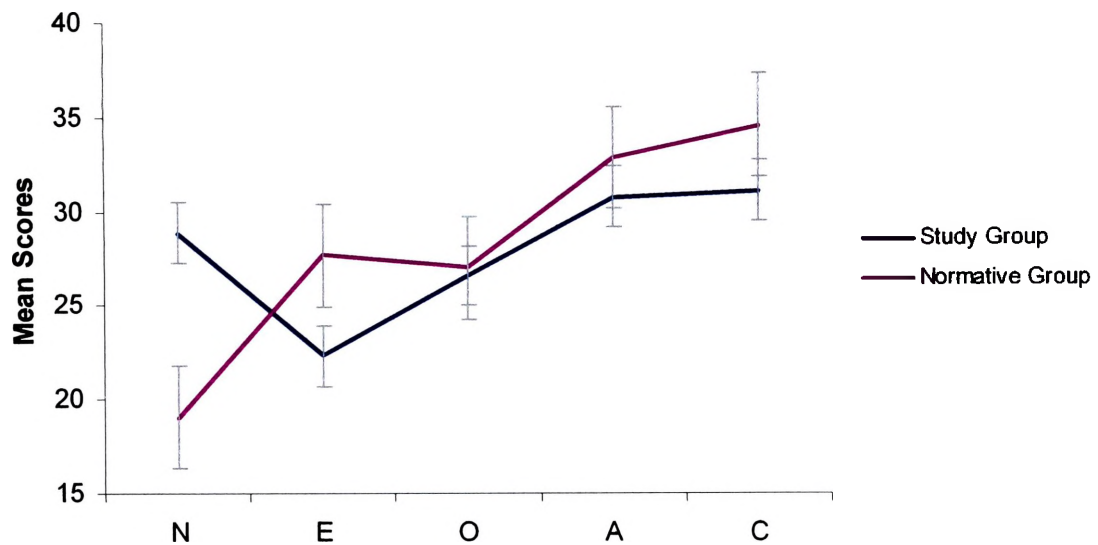
T-score and percentile scores for this group of patients (N=66) based upon the mean *NEO-FFI* subscale scores are presented below.

**Table 2. T-Score and percentile equivalents of mean NEO-FFI results**

	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness
<b>Mean</b>	28.86	22.35	26.61	30.77	31.11
<b>Std. Dev.</b>	7.85	6.73	7.19	7.43	7.61
<b>T-Score</b>	63	41	49	46	44
<b>Percentile</b>	90th	18th	47th	34th	28th

The means and standard deviations obtained on the *NEO FFI* questionnaires were compared to the non-clinical norms published by the questionnaire's authors (see Appendix D for further information about the process of comparison of these means). Results indicated that patients in the current study had significantly higher levels of Neuroticism; that is, there was no overlap in the 95% confidence intervals for the Neuroticism means in this study (Totals for all groups: 26.93 - 30.97) and the published normative Neuroticism means (18.59 - 19.55), and significantly lower levels of

Extraversion and Conscientiousness than the non-clinical normative group; that is, there was no overlap in the 95% confidence intervals for the Extroversion means in this study (Totals for all groups: 20.69 - 24.00) and the published normative Extroversion means (24.06 - 28.05), nor for Conscientiousness means: Current study Totals for all groups: 29.23 - 32.98; normative study: 34.21 - 34.93. The means for the other personality factors measured by this questionnaire were comparable to the published non-clinical sample. A comparison figure is presented below.



**Figure 4. NEO-FFI Means: Current study versus normative sample**

## Psychopathology

Scores above published norms on the Global Severity Index of the *BSI* indicate a probable mood disorder (Derogatis, 2000); and respondents with a Global Symptom Index (GSI) T score of 63 or higher (when compared to community norms), are considered to have met psychiatric “caseness” (Derogatis, 2000, p.23). Of the 66 patients who completed this questionnaire, 44 (66.67%) were above this clinical cut off limit. That

is, two-thirds of the patients in this study had significantly elevated levels of psychopathology.

The following table summarises mean scores for the group (N=66) with their corresponding T-scores and percentile equivalents calculated in comparison to the *BSI* combined sex community normative sample (N= 1134; Derogatis, 2000, p.35).

**Table 3. T-Score and percentile equivalents of mean BSI results (N=66)**

	Somatisation	Depression	Anxiety	Global Symptom Index
<b>Mean</b>	<b>9.05</b>	<b>9.94</b>	<b>11.59</b>	<b>30.57</b>
<b>Std. Dev.</b>	5.17	7.08	6.82	16.94
<b>T-Score</b>	<b>67</b>	<b>66</b>	<b>69</b>	<b>69</b>
<b>Percentile</b>	96th	95th	97th	97th

These results indicate that this group, on average, have clinically elevated levels of Somatisation, Depression, and Anxiety, when compared to a non-clinical normative sample.

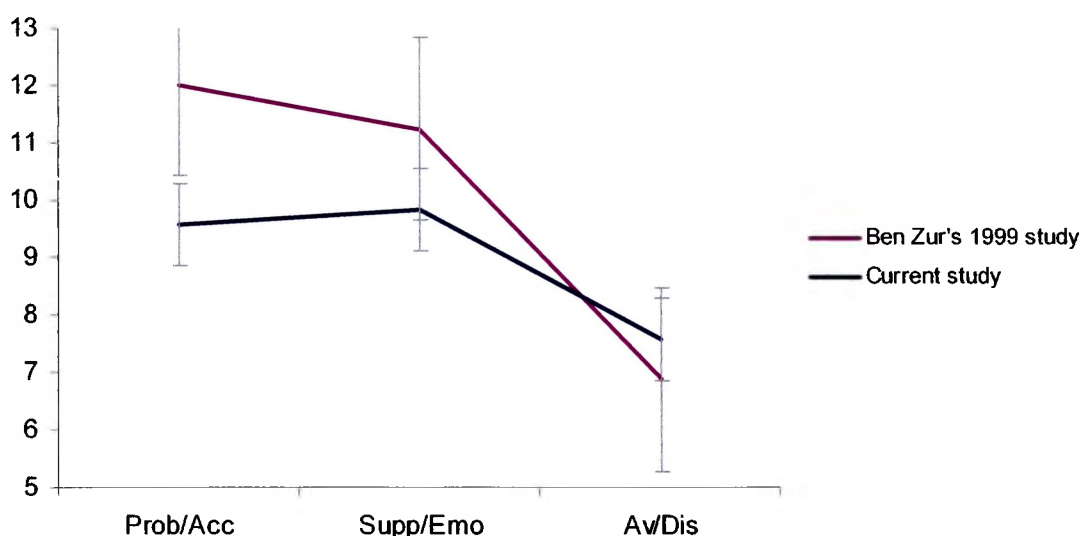
### **Coping styles**

As reviewed previously, three main types of coping meta-strategies have been identified in the literature: Problem/ Accommodation, Support/ Emotion and Avoidance/ Disengagement. Mean results for these factors of patients in the current study were compared to Ben-Zur's (1999) sample of 42 community residents (see Appendix D for further information about comparison of these means). The COPE subscales that make up each of these factors are presented below:

**Table 4. COPE scale factors (Ben-Zur, 1999)**

Factor	Subscale
Problem/ Accommodation	Planning, Active Coping, Positive Reinterpretation and Growth, Acceptance, Suppression of Competing Activities, Restraint Coping
Support/ Emotion	Seeking Social Support-Emotion, Focus-on and Venting of Emotions, Seeking Social Support-Instrumental
Avoidance/ Disengagement	Mental Disengagement, Behavioural Disengagement, Denial

Results indicated that all groups of patients in the current study reported using significantly fewer Problem/ Accommodation than those in Ben-Zur's (1999) sample; that is, there was no overlap in the 95% confidence intervals for these factors. Although the current study's mean scores on the Support/Emotion factor were generally lower than for the comparison group, there was some overlap in confidence intervals (indicating that the observed difference did not reach statistical significance). Again, there was some overlap in confidence intervals on the Avoidance/ Disengagement strategies factor between groups; however patients in the current group tended to use more of these strategies. The following figure depicts these results. Further data relating to this comparison of means is presented in Appendix D.



**Figure 5. Comparison of coping meta-strategies used by current patient group compared to non-clinical community sample**

## Illness perceptions

Results from this part of the study were compared to the means for two separate patient populations – acute pain patients, and chronic pain patients – published by Moss-Morris et al (2002). See Appendix D for further information about comparison of these means.

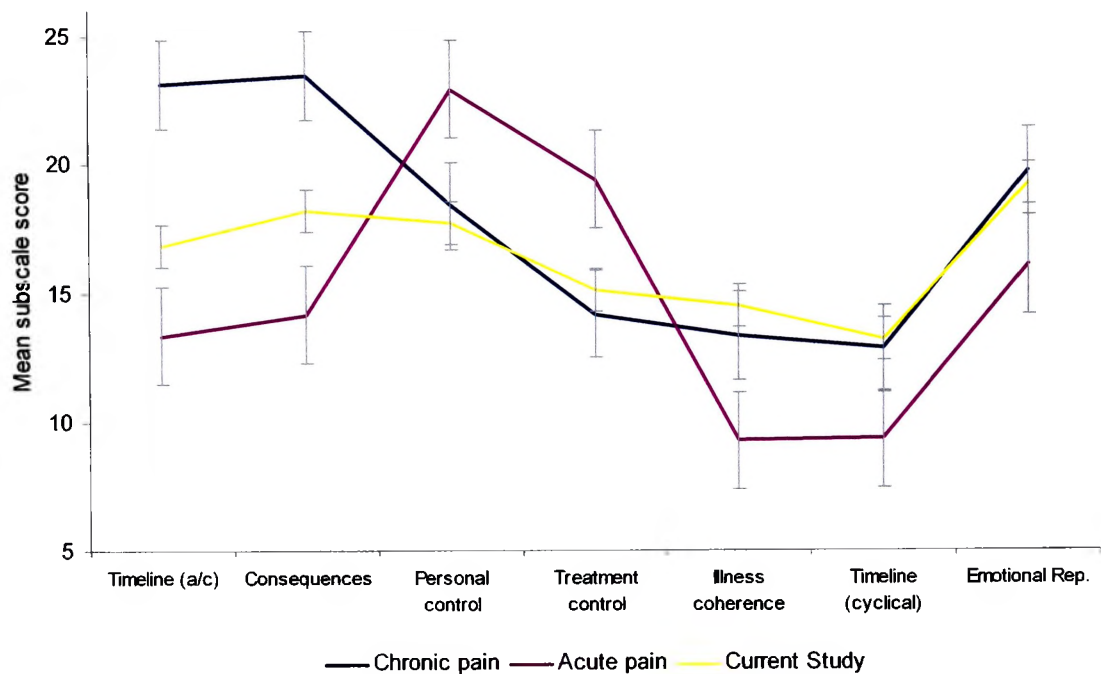
Results indicated that patients in the current study responded to the *IPQ-R* in a manner more closely resembling a chronic pain than an acute pain population, although there were some significant differences with each.

Patients in this study had significantly lower means on the Timeline (acute/chronic) and the Consequences subscales than the Moss-Morris et al, (2002) chronic pain group, however the means for both of these subscales was significantly higher than for the acute pain group. The means for the other subscales measured by this questionnaire were comparable to the published chronic pain sample.

When compared to the acute pain population, patients in the current study responded significantly differently on all *IPQ-R* subscales. Their means on the Timeline (acute/chronic) and the Consequences subscales were significantly higher than for the Moss-Morris et al, (2002) acute pain group, indicating that they perceived their illness as likely to have more dire consequences for their life and to persist for a longer period of time. Their scores on the Timeline (cyclical) and Emotional Representations subscale were also significantly higher than for the acute pain group, indicating that they felt that their symptoms were more unpredictable and they were more distressed by them than the acute pain patients. Patients in the current study also reported significantly lower scores on the Personal Control and Treatment Control subscales, indicating that they felt there was less that they or their treatment could do to improve their symptoms than did the acute pain group.



The following figure depicts these results.



**Figure 6. Comparison of IPQ-R means: Current study versus chronic and acute pain patients**

### **3.3.2 Predictors of emotional distress**

The results of the current study indicated that this group of presenting patients had clinically elevated levels of Somatisation, Depression, and Anxiety when compared to a non-clinical normative sample. Regression analyses were used to determine whether any significant predictors of this emotional distress were detectable based upon the personality, coping styles, and/or illness perceptions of these patients. Table 5 presents correlations found between the measures used.

**Table 5. Correlations between levels of distress and personality, coping styles and illness perception measures**

	<b>Somatisation</b>	<b>Depression</b>	<b>Anxiety</b>
Neuroticism	$r=0.20, p=0.06$	$r=0.47, p=0.00^{**}$	$r=0.39, p=0.00^{**}$
Extraversion	$r=-0.02, p=0.45$	$r=-0.27, p=0.01^{*}$	$r=-0.14, p=0.14$
Openness#	$r=0.21, p=0.08$	$r=0.13, p=0.30$	$r=0.20, p=0.10$
Agreeableness#	$r=-0.02, p=0.89$	$r=-0.07, p=0.55$	$r=0.07, p=0.57$
Conscientiousness#	$r=-0.16, p=0.19$	$r=-0.21, p=0.09$	$r=-0.07, p=0.59$
Sex#	$r=-0.01, p=0.95$	$r=0.01, p=0.45$	$r=0.12, p=0.35$
Age#	$r=-0.03, p=0.38$	$r=-0.19, p=0.14$	$r=0.05, p=0.72$
<i>IPQ-R</i> Consequences	$r=0.28, p=0.01^{**}$	$r=0.41, p=0.00^{**}$	$r=0.39, p=0.00^{**}$
<i>IPQ-R</i> Personal Control	$r=0.09, p=0.23$	$r=0.10, p=0.21$	$r=0.25, p=0.02^{*}$
<i>IPQ-R</i> Treatment Control	$r=0.14, p=0.123$	$r=0.16, p=0.10$	$r=0.17, p=0.08$
<i>IPQ-R</i> Emotional Representations	$r=0.44, p=0.00^{**}$	$r=0.45, p=0.00^{**}$	$r=0.72, p=0.00^{**}$
<i>IPQ-R</i> Illness Coherence	$r=-0.19, p=0.06$	$r=-0.31, p=0.01^{**}$	$r=-0.19, p=0.06$
Problem-Focused Coping	$r=0.12, p=0.166$	$r=-0.13, p=0.149$	$r=1.97, p=0.06$
Emotion-Focused Coping	$r=0.22, p=0.04^{*}$	$r=0.14, p=0.127$	$r=0.21, p=0.05^{*}$
Avoidance-Disengagement Coping	$r=0.46, p=0.00^{**}$	$r=0.41, p=0.000^{**}$	$r=0.45, p=0.00^{**}$

*\*\* Correlation is significant at the 0.01 level (1-tailed); \* Correlation is significant at the 0.05 level (2-tailed)*

*# Variables for which statistical significance was determined by a two-tailed test*

Independent variables correlating significantly (at or above  $p<0.05$ ) with the psychopathology variables were included in the regression with one exception: *IPQ-R* Emotional Representations was not included in the regression because it purports to measure emotional distress in much the same way as does the *BSI* scales, and was therefore expected to be highly correlated with them.

Results of the standard regression analysis, depicted in Table 5, indicated that there were three predictors of *BSI* Depression scores: Neuroticism, accounting for 21% of the variance  $F(1,64)=18.040$ ,  $p=0.000$ ; *IPQ-R* Consequences, together with Neuroticism, accounting for 30% of the variance  $F(1,63)=9.409$ ,  $p=0.003$ ; and *IPQ-R* Illness Coherence, together with the latter variables, predicting 35% of the variance  $F(1,62)=9.409$ ,  $p=0.018$ . Table 6 presents the standardised coefficients of this analysis.

**Table 6. Predicting depression levels: Hierarchical regression analysis results**

Variable	$\beta$	t value	p value
Neuroticism	0.32	2.80	0.01**
<i>IPQ-R</i> Illness Coherence	-0.24	-2.35	0.02*
<i>IPQ-R</i> Consequences	0.23	2.14	0.04*
Avoidance-Disengagement Coping	0.20	1.76	0.08
Extraversion	-0.06	-0.50	0.62

There were also three predictors of *BSI* Anxiety levels: The *COPE* scale factor Avoidance-Disengagement was the strongest predictor, accounting for 19% of the variance  $F(1,64)=16.301$ ,  $p=0.000$ ; *IPQ-R* Consequences was next, and together with Avoidance-Disengagement, this accounted for 24% of the variance  $F(1,63)=5.516$ ,  $p=0.022$ . The third predictor was Neuroticism, which, together with the latter variables, predicted 28% of the variance  $F(1,62)=4.475$ ,  $p=0.038$ . Table 7 presents the standardised coefficients of this analysis.

**Table 7. Predicting anxiety levels: Hierarchical regression analysis results**

Variable	$\beta$	t value	p value
Neuroticism	0.25	2.20	0.03*
Avoidance-Disengagement Coping	0.26	2.22	0.03*
Consequences	0.24	2.15	0.04*
Emotion-Focused Coping	0.14	1.33	0.19

There was just one predictor of *BSI* Somatisation scores. This was the *COPE* scale factor Avoidance-Disengagement, predicting 20% of the variance  $F(1,64)=16.849$ ,  $p=0.000$ . Table 8 presents the standardised coefficients of this analysis.

**Table 8. Predicting somatisation levels: Hierarchical regression analysis results**

Variable	$\beta$	t value	p value
Avoidance-Disengagement Coping	0.38	3.24	0.00**
<i>IPQ-R</i> Consequences	0.15	1.27	0.21
Emotion-Focused Coping	0.14	1.28	0.20

### **3.4. Summary of findings: Study 1**

This study investigated a sample of 66 patients presenting to general practitioners with physical symptoms for which no physical pathology could be detected. The study found that these patients had higher levels of Neuroticism, and lower levels of Extraversion and Conscientiousness than would be expected from a non-clinical or 'normal' population. The majority of these patients displayed levels of depression, anxiety and somatisation that would be considered clinically elevated. They were also less likely to use 'helpful' or

adaptive coping strategies than a non-clinical community sample. Finally, these patients had beliefs about their physical symptoms that would be more expected from a chronic pain population than an acute pain population, expressing more distress about their symptoms, feeling the symptoms were more unpredictable, believing that they had less control over them, and believing that any treatment would be less effective, than did an acute pain population.

Study 1 also investigated whether coping styles, personality variables, and/or illness perceptions could predict psychopathology (anxiety, depression and somatisation symptoms) in this sample. Results of the hierarchical regression analysis indicated that a combination of illness perception and coping measures significantly enhanced the understanding and prediction of the different manifestations of psychopathology, as compared to levels of prediction derived from personality variables such as Neuroticism alone. In fact, in the case of Somatisation levels, of all the variables considered, an Avoidance-Disengagement coping style was the best predictor, accounting for 25% of the variance.

Neuroticism best predicted depression levels, and together with *IPQ-R* Consequences, and *IPQ-R* Illness Coherence, predicted 41% of the variance in depression scores. Neuroticism alone accounted for 15% of the variance in anxiety levels, and together with *IPQ-R* Consequences and Avoidance-Disengagement coping predicted 34% of the variance in anxiety scores.

### **3.5 Discussion Study 1: Patient characteristics and predictors of patient distress**

This study investigated the personality traits, coping styles, illness perceptions, and psychological symptom variables (depression, anxiety and somatising symptoms) of a group of patients presenting to Australian GPs with symptoms that were not accounted for by obvious organic illness. Although there was no attempt to make formal psychiatric diagnoses for these patients, testing of psychological variables indicated that these patients had more in common with psychological patient groups than with non-clinical normative groups. Thus the first aim of this study, to establish that this group of patients differed in a clinically significant way from ‘normals’ or a non-clinical group, was met. That is, this sample represented a clinical sample.

For instance, results indicated that patients in this study displayed significantly higher levels of neuroticism and lower levels of extraversion than would be expected in a non-clinical population (Costa & McCrae, 1992). As noted previously in this paper, high neuroticism has been associated with ineffective coping skills, “midlife crisis”, life dissatisfaction, and stress vulnerability (Costa & McCrae, 1980; McCrae & Costa, 1986; McCrae & Costa, 1990; Vandergeest, 2001); and high neuroticism and low agreeableness are found among CFS patients (Buckley et al., 1999), and together are useful in predicting anxiety disorders (Trull & Sher, 1994). In line with this, in the current study, levels of neuroticism were positively correlated with levels of depression and anxiety in these patients. The majority of patients in this study (approximately 67%) would be considered “probable cases of mood disorder” (Derogatis, 2000, p.23) based upon their Global Symptom Index scores on the *BSI*, with average Somatisation, Depression and Anxiety subscale scores all at or above the 95th percentile level.

Patients in this study also reported using significantly fewer Problem/ Accommodation coping strategies than a community based sample, and there was a non-significant trend towards them using fewer Support/Emotion coping strategies, and more Avoidance/ Disengagement strategies than the non-clinical normative group. Problem/ Accommodation coping has been found to be negatively correlated with negative emotional states and faulty decision making (Ben-Zur, 1999). Emotion-focused coping for physically ill patients has been found to be aimed at reducing, preventing or tolerating emotional and bodily reactions that are characterised as stressful (Ben-Zur, 2002), and Avoidance-Disengagement coping has been negatively related to positive affect, positively correlated with trait anxiety, and negatively correlated with optimism, the feeling of generally being able to do something about stressful situations, self-esteem and hardiness (Ben-Zur, 1999; 2002; Carver et al., 1989; Penley et al., 2002).

These patients also had illness-related cognitions more closely aligned with a chronic pain group than an acute pain population. They perceived their illness as likely to have more dire consequences for their life and to persist for a longer period of time than an acute pain population; they felt more distressed about their illness, felt that it was more unpredictable, and that there was less that they or their treatment could do to improve their symptoms than did the acute pain group.

The above results also support the literature reviewed in Section 2 positing various factors that may underlie health-related anxiety. Thus, the second aim of this study was to investigate whether this was the case: the aim was to comprehensively investigate whether psychological factors including ill-founded illness cognitions, unhelpful personality traits, and ineffective coping styles are detected amongst this group of apparently physically healthy patients. The above results indicate that this was so.

This study could have been improved if comparison groups of patients presenting with medically explained symptoms, and/ or with a chronic illness had also been included.

Overall, these patients presenting to Australian GPs with unexplained medical symptoms possess psychological symptom severity levels that are not insignificant. These patients have the potential to develop further psychological maladjustment, and this point of contact would appear to be an important time to warrant intervention. GPs should be offered training in providing alternative explanations and management techniques for these physical symptoms with a view to reducing maladaptive cognitions and behaviours.

Patients were initially recruited to this study on the basis of GPs' assessment that their symptoms were psychological in origin (those whose symptoms were found to be accounted for by organic pathology were later removed from the study), and results indicated that the group were, in fact, presenting with more psychopathology than a non-clinical population. That is, GPs were able to identify patients with psychological problems relatively well, without the need to make formal psychiatric classifications. GPs often recount that they know when a patient will prove to be difficult to treat because of high levels of health-related anxiety, even though they may not be able to confidently assign a psychiatric condition.

It is acknowledged that patients recruited by GPs to this study may not be representative of those seen in wider general practice consultations. GPs who participated in this study had expressed an interest in attending a training program in cognitive behaviour therapy and they may have had more interest, skills, or such patients presenting to their practice. In addition, patients selected may have been more salient to the GP, and the features that made them more salient may be important in terms of implications drawn from this study. It is also acknowledged that this method of identifying health-related anxiety patients could miss other cases of genuine psychopathology, and indeed this prior



psychopathology could have accounted for the health-related anxiety. These limitations would have been reduced had the GPs been instructed in more rigid inclusion and exclusion criteria or a diagnosis of a psychiatric condition was made by a mental health professional (e.g., a somatising disorder).

Goldberg, Novack & Gask (1992) state that GPs should be educated in basic psychiatric diagnostic skills before they are taught to target somatising presentations. Although it may have been of interest to examine the extent to which these patients also met formal psychiatric diagnoses, this was not the central aim of the study, which was to follow characteristic general practice consultations, where GPs do not typically make psychiatric diagnoses (Harris, Silove & Kehag, 1996). In addition, making formal diagnoses would be likely to miss some patients who present with medically unexplained somatic complaints and yet do not meet full criteria for a psychiatric diagnosis (Mayou, 1991; Sumathipala et al., 2000; Wessley, 1996); and these patients often still pose significant difficulties for the general practitioner (Richter & Sansone, 1999). It has also been observed that the use of the DSM in general practice is impractical, unwieldy and even inappropriate (Hickie, 1999; Jenkins, Smeeton & Shepherd, 1988; Lidbeck, 1997; Tyrer, Murphy & Kingdon, 1988), and there is significant evidence that misdiagnosis and/or failure to recognise a diagnosable psychiatric disorder occurs frequently in general practice (e.g., see Hickie, Davenport, Scott, Hadzi-Pavlovic, Naismith & Koschera, 2001). Finally, the common psychological symptom patterns of patients seen in primary care, a mixture of affective, anxiety and somatoform disorders, do not always readily fit within the current psychiatric diagnostic system (Goldberg et al., 1989; Hickie, 1999; Hickie, Hooker, Hadzi-Pavlovic, 1996; Gask & Rogers, 1998; Goldberg & Gater, 1996).

The third, important, objective of Study 1 was to investigate whether coping styles, personality variables, and/or illness perceptions could predict psychopathology (anxiety,

depression and somatisation symptoms) in this sample. Results indicated that while depression, anxiety and somatisation levels were correlated with one another, they were also correlated somewhat differently with individual psychological variables. The results are consistent with the notion that each of these manifestations of psychopathology may share a common core, but remain independent in that they are significantly influenced by different mediating factors. For example, patients' sense of understanding of their symptoms (*IPQ-R* Illness Coherence subscale) was related to depression levels, but not to anxiety or somatisation. There were also different predictors of these distress measures, with Neuroticism best predicting depression levels, and an avoidance-disengagement coping style best predicting anxiety and somatisation. The study also helped identify certain specific illness-perception and coping measures as key variables. Perception of illness consequences (*IPQ-R* Consequences) was critical to both anxiety and depression whereas *IPQ-R* Illness Coherence emerged as an important predictor of depression but not anxiety. Of the coping factors, an Avoidant-Disengagement coping style clearly emerged as the most salient coping style related to levels of distress. Neuroticism was the most pertinent personality variable, and Consequences and Emotional Representations were the illness cognitions most related to levels of psychological distress, with Personal Control and Illness Coherence also emerging as important.

These findings support the posited connections between coping styles, illness perceptions and health anxiety, and collectively support cognitive behavioural models of health-related anxiety. The findings also raise the possibility that CBT strategies aimed at increasing understanding of physical symptoms (illness coherence) and perceptions of personal control, and at reducing passive, avoidant coping styles when dealing with stress could reduce overall levels of psychological distress. Training for GPs in methods that increase patient feelings of personal control in particular could be indicated when addressing high

levels of anxiety, while attempting to teach methods to decrease dysfunctional coping might help reduce somatisation and anxiety levels.

## **4. Study Two: Efficacy of a brief CBT training program for GPs**

### **4.1. Introduction: Treating psychological symptoms in general practice settings**

As GPs are the first port of call for patients suffering psychological distress, particularly health-related anxiety, the earliest management is when they present to their GP for medical tests for their symptoms. The literature offers examples that indicate that it is effective to treat such patients when they first consult their GP. At times such treatment has been conducted by counsellors who work in the GP setting (e.g., Kashner, Rost, Cohen, Anderson, & Smith, 1995; Lidbeck, 1997), and at times by GPs trained in counselling approaches themselves (e.g., Gask, Goldberg, David & Creed, 1989; Goldberg, Gask & O'Dowd 1989). The following two sections will explore the literature reporting results from these two approaches.

There have been a number of studies comparing psychological treatments with standard GP care and/ or pharmacotherapy to treat patients suffering psychological symptoms. A review of the studies using mental health professionals to conduct the psychological treatments is presented below – that is, GPs did not conduct the interventions – they were conducted by mental health professionals working within a primary care setting. It should be noted that this review relates to patients presenting to general practice settings specifically, rather than reviewing general psychotherapy outcomes for these populations.

*Depression:* Results have been mixed, with some studies reporting no lasting gains for psychological treatments, or no difference from pharmacotherapy or routine GP care. Teasdale, Fennell & Hibbert (1984) found that cognitive therapy was superior to usual GP care in reducing major depression symptoms post-treatment, but found that these differences were non-significant at three months post-treatment. Scott & Freeman (1992)

reported results of a UK study that treated patients from 14 general practices, comparing routine GP treatment to CBT with a clinical psychologist, counselling with a social worker, and Amitriptyline treatment with a psychiatrist in the treatment of depression. All groups improved, however the specialist treatment was at least twice as expensive as the GP consults, and the authors concluded that the expense of the additional treatment was unwarranted given the results, even though patients and the GPs preferred the psychological therapies. Mynors-Wallis, Gath & Lloyd-Thomas (1995) found that there was no significant difference between patients with severe depression treated with 'problem-solving therapy' and Amitriptyline, although both were superior to a drug placebo. There was a near-significant trend towards lower depression levels in the problem-solving group, lower attrition rate and higher patient satisfaction, but it also took the longest time per consultation.

Ward, King, Lloyd, Bower, Sibbald, Farrelly, Gabbay, Tarrier & Addington-Hall (2001) reported the results of a major London UK study in which 464 GP patients suffering depression or mixed anxiety and depression were treated with 12 sessions of routine GP care, or non-directive counselling, or CBT. 197 patients were randomly assigned to one of these three groups, 137 patients chose the treatment they wanted, and 130 were randomly allocated to the two psychological therapies only. All of the groups improved significantly over time, with the two psychological treatments seemingly equally superior to usual GP care at 4 months post-treatment, however by 12 months post-treatment, there was no significant difference between any of the three groups.

Other studies have found more positive results for psychological treatments with depressed GP patients. Blackburn, Bishop & Glen (1981) compared cognitive therapy and Amitriptyline in the treatment of depression, and found that patients treated with a combination of these therapies had more symptom reduction than drug treatment alone.

Cognitive therapy alone was as effective as the combined treatment regime. Ross & Scott (1985) found that CBT was superior to usual GP treatment, and that these treatment gains were maintained at 3, 6, and 12 month follow-up. Miranda & Munoz (1994) compared eight weeks of group CBT to no treatment for 'minor depression' and found that the CBT group showed significantly superior symptom reduction, which was maintained at one-year follow-up. This group also had fewer psychosomatic symptoms than those who received no intervention.

It is difficult to determine the reason for these mixed results, and it is likely they arise as a result of methodological differences between the studies. With depression such a major and widespread problem, future studies investigating the efficacy of treatment for depression in primary care patients will need to consider past results and control possible confounding variables as much as is possible.

*Psychological factors associated with medical conditions:* Cognitive behavioural treatments have been found to be effective in assisting to reduce distress and symptomatology for the following conditions: irritable bowel syndrome (Boyce, Gilchrist, Talley & Rose, 2000; Payne & Blanchard, 1995); temporomandibular disorders (Dworkin, Turner, Wilson, Massoth, Whitney, Huggins, Burgess, Sommers & Truelove, 1994); chronic insomnia (e.g., Epsie, Inglis & Harvey, 2001); non-cardiac atypical chest pain (Klimes, Mayou & Pearce, 1989; Klimes, Mayou, Pearce & Fagg, 1990; Mayou, et al., 1997; van Peski-Oosterbaan, Spinoven, van Rood, van der Does, Bruschke & Rooijmans, 1999), and chronic fatigue syndrome (e.g., Akagi, Kilmes & Bass, 2001; Butler, Chalder, Ron & Wessley, 1991; Deale, Chalder, Marks & Wessely, 1997; Sharpe, Hawton, Simkin, Suraway, Hackman, Klimes, Peto, Warrel & Seagroatt, 1996). However Sanders, Bass, Mayou, Goodwin, Bryant & Tyndel (1997) found that many patients who had presented to cardiac clinics with chest pain but no evidence of cardiac pathology did not significantly

improve when a cardiac nurse provided a one-hour education session about ways to reduce the symptoms, followed up with written information and two phone calls. They concluded that cardiac patients require better preparation before tests of heart functioning and more information and discussion of results by their doctors immediately afterwards, because the patients in this study were not prepared for negative findings (i.e., no pathology).

An example of another of these studies supports the illness perception-coping literature reviewed above. Petrie, Cameron, Ellis, Buick & Weinman (2002) found significant positive effects from addressing irrational illness cognitions and coping behaviours in patients who had just suffered their first heart attack. They randomly allocated 65 patients who had suffered a myocardial infarction to an intervention designed to specifically alter dysfunctional beliefs about their illness and related unhelpful behaviours, or to standard care by a rehabilitation nurse. They found that the intervention significantly altered the patients' conceptions of their illness prior to leaving hospital, so that they were more optimistic about the outcome of their condition, and perceived that it would have less dire consequences upon their life than the control group. They reported feeling better informed about their illness and more prepared to leave hospital. At three months post intervention there was a significant difference between the groups with regard to the speed at which they went back to work (with the experimental group returning earlier). The latter group also reported fewer angina symptoms at this follow-up point. These results were interpreted as indicating that the intervention session normalised the non-cardiac symptom experience for these patients. This study demonstrated that changing the underlying illness perceptions of the patient group improved their functional behaviours and outcome. The authors urge that doctors investigate illness cognitions as

early as possible in order to address misconceptions and negative beliefs that might otherwise evolve into negative health behaviours.

*Somatising behaviour and medically unexplained symptoms:* A review of literature regarding the management of health-related anxiety indicates that cognitive behavioural approaches are also effective in treating somatisation and abnormal illness behaviour (e.g., Allen, et al, 2001; Barsky, 2001b; Clark et al, 1998; Salkovskis, 1989; Sharpe, 1995; Avia, Ruiz & Olivares, 1996), and research indicates that early management of these problems is preferable (e.g., Payne & Blanchard, 1995; Lidbeck, 1997; Kroenke & Swindle, 2000). Nezu et al, (2001) concluded, following a meta-analysis of studies measuring the effectiveness of CBT in treating functional somatic symptoms, that although there were some methodological shortcomings in the literature:

*“preliminary results point strongly to the potential efficacy of CBT approaches for the treatment of a wide range of unexplained medical symptoms, including individuals diagnosed with ‘full-blown’ somatization disorder (e.g., Kashner et al., 1995). As such, additional research appears justified and necessary”* (p.552).

Kroenke & Swindle (2001) agreed, following their meta-analysis of 31 controlled trials of CBT targeting somatisation or somatising symptoms. They found that physical symptoms were the most responsive to treatment, with CBT-treated patients improving more than control subjects in 71% of the studies, and showing a trend towards improvement in a further 11% of the studies. They found however, that there was not always a corresponding reduction in psychological distress, with only 38% of the studies showing definite reduction in the treated group, and 8% showing a trend towards this. They concluded that benefits in the form of reduced symptoms can occur regardless of a reduction in emotional distress. They found overall that group therapy was effective, and that interventions with as few as 5 sessions proved effective.



The following studies are presented in more detail; they were completed specifically with general practice patients, and are therefore of most relevance to this study.

Wilkinson et al., (1994) presented a pilot study with eleven patients presenting in primary care with unexplained physical symptoms. They successfully used reattribution techniques (see Goldberg et al., 1989) and problem solving to alter the way that patients interpreted the symptoms. Although results were positive, this study was not a randomised controlled trial, and it is therefore possible that these patient's perceptions might have changed for other reasons.

Two other uncontrolled studies also showed positive results. Hellman, Budd, Borysenko, McClelland & Benson (1990) found that patients with psychosomatic complaints reported less physical discomfort and fewer GP visits following a six-week CBT program (at 6-months follow-up). McLeod & Budd (1997) gave CBT videos and homework assignments to 171 somatically preoccupied patients, and found pre-post decreases in physical and emotional distress and medical utilisation, and increases in functional status 12 months after participation. Again, although these results were positive, lack of randomisation and a control group, leaves open the possibility that these changes might have occurred for other reasons.

In a randomised controlled trial Speckens, van Hemert, Spinhoven, Hawton, Bolk & Rooijmans (1995) used cognitive behavioural therapy with 39 patients with medically unexplained physical symptoms in comparison with optimised medical care (N=40) in a primary care setting. The intervention group received between six and 16 sessions of cognitive behavioural therapy. Therapeutic techniques used included identification and modification of dysfunctional automatic thoughts and behavioural experiments aimed at breaking the vicious cycles of the symptoms and their consequences. The control group received optimised medical care. At six months, the follow up point, the intervention

group reported a higher recovery rate, a lower mean intensity of the physical symptoms, and less impairment in sleep than did the controls. The intervention and control groups also differed with regard to frequency of the symptoms, limitations in social and leisure activities, and illness behaviour. At 12 months follow up the differences between the groups were largely maintained. The authors concluded that CBT is a feasible and effective treatment for general medical patients with unexplained physical symptoms.

Kashner, et al., (1995) randomly allocated 70 patients meeting DSM criteria for somatisation disorder to routine clinical care (control condition) or a CBT package of eight, 2-hour sessions over four months. Significant improvements for the intervention group were reported compared to control subjects regarding indices of physical functioning, general health, mental health and social functioning in the year following treatment, although the effect size was modest. In addition, group treatment led to a 52% net saving in health costs due to significant decreases in health services utilisation.

Lidbeck (1997) reported results of eight, 3-hour group education sessions based on CBT principles for a group of 50 general practice patients with “functional somatic symptoms”. The techniques focused on psychoeducation to explain the physiological basis of anxiety-related symptoms and relaxation training. The study found that six months after treatment patients showed significant improvement in somatic preoccupation, hypochondriasis and medication usage when compared to non-treated patients.

Sumathipala, Hewege, Hanwella & Mann (2000) reported results of a randomised control trial in primary care settings in Sri Lanka of the effect of six, 30-minute sessions of CBT upon 24 patients with medically unexplained symptoms. Their control group (N= 21) received standard clinical care. Patients treated with CBT had significantly fewer somatic complaints, GP visits, and psychological distress at three months follow-up.

In contrast, another randomised controlled study, Schilte, Portegijs, Blankenstein & van der Horst (2001) found that asking somatising patients to disclose traumatic events across two to three sessions made no significant difference to the symptoms or distress of these patients, although the intervention was received favourably by the patients and their doctors. However such an intervention could not be considered a cognitive-behavioural exposure therapy approach because underlying principles of desensitisation including specifications regarding duration, regularity and repetition were not employed. This study may have yielded different results had a more theoretically based approach been attempted.

#### **4.1.2 Summary: Efficacy of psychosocial treatments in GP settings**

The above review indicates that there are some mixed results for the efficacy of psychosocial treatments in GP settings, although there is clearly some evidence that targeting psychological symptoms in GP patients can be effective. Brown & Schulberg (1995) conducted a meta-analysis of the efficacy of many of the then available studies, and concluded that there was general support for psychosocial treatments in primary care, although considerable methodological diversity in the studies limited their comparability. They concluded that the more specific and directive (e.g., CBT) models tended to produce more positive results when evaluated using randomised control trials. Barkham (2001) conducted another review and concluded that for treatment of depression in primary care settings, there is little evidence for long-term differences between standard GP care, interpersonal therapies/ non-directive counselling, and CBT, but commented that there is a broader research base of efficacy of cognitive therapy, and called for future research in non-directive counselling to identify the effective components of the latter and link them to a theoretical base.

There is evidence to suggest that the subsequent use of medical services is reduced when patients are treated in the primary care setting (e.g., Cummings, 1991; Gabbard, Lazar, Hornberger, & Spiegel, 1997; Rosen & Wiens, 1979). Marsh & Barr (1975) found that there was a significant drop in the number of visits to the GP after cessation of counselling in contrast to the same period of time before. There have also been a number of studies that established a reduction in the number of psychotropic and other drugs that were subsequently prescribed (e.g., Cohen, 1977, 1978; Hemmings & Cogan, 1993; Hemmings, 1997; Waydenfeld & Waydenfeld, 1980).

## **4.2. Training GPs to manage psychological symptoms in a GP practice**

### **4.2.1 Should GPs be trained in basic CBT?**

On the whole, although some results have been mixed, especially for depression, it appears that psychological therapies, in particular cognitive behavioural techniques employed by mental health practitioners does significantly improve various psychological symptoms in general practice patients. Many have argued that GPs should be trained in effective psychological approaches to managing these patients themselves (e.g., Azorin, 1995; Gask, Goldberg, David & Creed, 1989; Goldberg, Gask & O'Dowd, 1989; Gray, Proudfoot & Woolfman, 2000; Lidbeck, 1997; Sumathipala et al., 2000). Williams (1998), a British GP, notes, "...the potential benefits that may be derived from introducing and integrating a cognitive approach into our clinical practice – in terms of reduced distress for the patient and the doctor, reduced costs, and prevention of iatrogenic damage – are enormous" (p. 147).

It has been argued that such training for GPs should have an emphasis upon teaching practical strategies that are not too time consuming (Gray et al., 2000; Lidbeck, 1997;

Sumathipala et al., 2000). Richter et al. (1999) state that although there have been some studies demonstrating the efficacy of CBT in primary care settings, it is difficult to find “capable treatment providers or cognitive behavioural manuals” for GPs in GP settings. Following their successful trial of CBT with general practice patients presenting with medically unexplained symptoms, Speckens et al. (1995) concluded that “basic principles of cognitive behavioural therapy ... could probably be incorporated in routine clinical practice” (p.1332). It has been logically pointed out that it would be necessary for the majority of these skills to be adaptable to brief time periods: typical GP consultation times (Gray, Proudfoot & Wolfman, 2000).

Advantages of teaching GPs to offer effective psychosocial treatments to appropriate patients includes the fact that they offer affordable and rapid access to health care (Hafner, 1999; Keks, Altson, Sacks, Hustig & Tanaghow, 1998; Nezu et al., 2001), and there is some evidence that some patients prefer such treatment from their GP or doctor than visiting a psychiatric service (King, 1993; Kroenke & Swindle, 2001; Lipowski, 1988; Mayou, et al., 1997; Sanders, et al., 1997). Lidbeck (1997) states that GPs have an advantage over clinical psychologists in treating somatising behaviour in that they possess a professional knowledge of physical examinations and exclusion of physical disease. Nezu et al., (2001) state that because most somatically preoccupied patients believe that their symptoms are caused by biological phenomena they do not typically consider consulting a mental health clinician in the first instance, and referral to a mental health practitioner may be ultimately insufficient if the GP isn't giving forth like-minded advice and strategies. They state that health care teams who work from the same perspective are likely to be more effective and efficient.

Nezu et al, (2001) commented that research into the efficacy of CBT for psychological conditions that are prevalent in general practice settings has not been as forthcoming as it

could be; in particular for medically unexplained symptoms, despite promising early research. They state that this may be because of a lack of general awareness amongst medical practitioners of the potential efficacy of CBT in treating this problem. They advocate education and training for health care professionals in the value of such an approach. They add that because of the significant personal, medical and economic impact these presentations represent, further research generally should be conducted. They state that this should begin in primary care or family medicine settings. They add that GPs are likely to be

*“amenable to nonmedical interventions, such as CBT approaches, in dealing with difficult and problematic patients ... Not only does it appear that CBT leads to improving health, but it can also engender lower health costs and less ‘unnecessary’ usage of time and resources” (p.572).*

Naismith, Hickey, Scott & Davenport (2001) comment that while advances in antidepressant medication effective in treating common mental disorders has occurred over the past decade, so too have effective non-pharmacological interventions like CBT. They state, “Unfortunately, as few general practitioners have had the opportunity to learn these strategies, they are rarely offered in general practice” (p. S42).

The current author considers that one of the most important reasons for training GPs in effective psychosocial treatments is that this may help to prevent the development of irrational cognitions about non-pathological physical symptoms and subsequent unhelpful behaviours in some patients. For instance, if a GP can reduce a burgeoning fear that a physical symptom is a sign of disease: by physical testing; providing a convincing cognitive behavioural explanation for anxiety-induced symptoms; and teaching an arousal reduction technique, for example, then it is possible that patients may not then go on to develop unwarranted somatic preoccupation, or a psychiatric disorder of some description (e.g., panic disorder, a somatoform disorder, or even chronic fatigue syndrome). The review of

successful CBT treatment studies for health anxiety in the previous section, and the parallel work being conducted on altering negative illness cognitions in patients with medical illnesses, indicates that at least a basic form of these approaches should be offered to patients at the first point of call, which is typically the GP.

#### **4.2.2 Evaluation of recent psychosocial training programs for GPs**

Surprisingly, a review of recent literature offers few examples of the evaluation of CBT training programs for general practitioners, and of those that have been reported, evaluation of the impact of the programs upon patients has been limited (Gask, 1992; Gask, 1998; Gask & Rogers, 1998; Lin, Katon, Simon, Von-Korff, Bush, Rutter, Saunders & Walker, 1997). The following presents a summary of psychological/ psychiatric education programs for GPs – not necessarily cognitive behavioural in nature – presented in the literature.

Goldberg et al., (1989) outlined an influential teaching package for GPs emphasising a “retribution” approach to managing somatising patients:

*“The aim of retribution is to normalize the patient’s interpretation of their bodily symptoms, modify their beliefs about the causes of their symptoms, and treat any underlying depression”* (Morris et al., 2002, p. 394).

The package involves teaching small groups of GPs the following skills:

- Basic rapport building skills to assist the patient to “feel understood”, with the rationale that if the patient does not believe that the doctor has adequately heard and understood their physical complaints, they will not feel confident that the GP really understands their concerns and will be less likely to listen to suggestions

from them; this section includes a history taking of the pain, including exploring social and family factors

- Providing feedback to the patient about the results of the physical examination; acknowledging the reality of the symptom or pain, and reframing the patient's complaint by linking it to life events and other (e.g., psychological) symptoms
- The GP is then instructed in methods for establishing a link between the physical complaint and emotional states

These skills are taught to the GP via instructional videotape, role-playing, "micro-teaching" of some of the skills, and video feedback of performance (GPs were asked to videotape themselves using the skills, and the tapes were reviewed and evaluated). The authors of the program (see Gask et al., 1989) originally evaluated whether 22 UK GP trainees could learn these skills effectively, and the frequency with which they used the skills after training. They found that following training GPs used the first two stages of the training significantly more frequently than they did prior to training, and that their ability to make links between a reported symptom and a psychological state improved. Kaaya, Goldberg & Gask (1992) replicated these successful results. Since then, this training has been found to deliver cost benefits to the community, with the cost of secondary referrals from trained GPs reducing by 23%, and total direct health care costs, including the costs of training, reducing by 15% (Morriss, Gask, Ronalds, Downes-Grainger, Thompson, Leese & Goldberg, 1998). The latter figures were derived by comparing the health care costs of 103 UK patients with somatised mental disorder whose GPs had not yet been trained, with 112 such patients whose GPs had been trained using this model. The same study found that, compared to baseline measurements, there was a difference at three months (approaching, but not quite reaching, statistical



significance) between the numbers of patients considered to meet psychiatric caseness among patients whose GPs had been trained under the attribution model, and those who had not. The authors noted that because this study was not a randomised controlled trial, there could have been other explanations for the differences observed between patient groups than the effect of the training (Morriss et al., 1998).

Again using a pre-post training design to study the impact of reattribution training for GPs upon their somatising patients, this group of researchers (Morris, Gask, Ronalds, Downes-Grainger, Thompson & Goldberg, 1999) found that the training significantly improved function and reduced psychopathology at 3 months among patients who did not have fixed beliefs that their symptoms had a medical cause. Among patients with a more severe somatising presentation – those who had fixed beliefs that their symptoms had a physical cause – the training reduced depression levels at 1 month by 50%, but by 3 months there was no evidence of reduced psychopathology. Again, the lack of a control group for this study renders any conclusions regarding observed differences tentative.

Morriss & Gask (2002) published the results of another pre-post study with the aim of determining whether the reattribution training (four, two-hour training sessions) could change certain outcomes for patients whose GPs had completed the education program. The outcomes measured included patient satisfaction with care, patient beliefs that the symptoms were physically caused, and doctor-initiated investigations, prescriptions and referrals. Eight GPs participated, with different sets of patients recruited for the before (N=103) and after (N=112) comparisons. Results indicated that reattribution training did not alter the way that doctors investigated, prescribed for, or referred these patients. However patients reported greater satisfaction with the overall help received from the GP, although there was no difference with the more specific measure of satisfaction with the way that the doctor explained their symptoms. At 3 months post baseline, there were

a significantly lower number of patients who attributed their symptoms solely to physical causes. The authors admit again that because this study was not a randomised controlled trial, and did not use contemporaneous control subjects, unintended confounding factors or selection bias limits the confidence in the conclusions that can be drawn.

The author of the current work considers that a deficit in the attribution training is that beyond providing the patient with a psychological explanation for their symptoms, there was no attempt made to instruct GPs in basic strategies to reduce the somatised symptoms (e.g., breathing or distraction techniques, rudimentary cognitive challenging).

Carr & Donovan (1992) reported a consultation-liaison model of education for Australian GPs, where a psychiatry register worked for half-a-day in various general practices, assessing patients referred by the GP, sometimes with the GP present, then offered advice regarding diagnosis and treatment, with the GP taking responsibility for the patient's psychiatric treatment when possible. An evaluation of this model's impact upon the GPs' psychiatric knowledge, confidence and referral practices was pessimistic, indicating little change (Carr, Faehrmann, Lewin, Walton & Reid, 1997), as was the case when patient outcomes were considered (Carr, Lewin, Reid, Walton & Faehrmann, 1997).

Gask, Goldberg, Boardman, Craig, Goddard, Jones, Kelsey, McGrath & Miller (1991), using a train the trainer model, found that simple psychiatric problem-based interviewing techniques could be effectively taught to experienced GPs and then passed on by these GPs to trainees. Video-instruction using role-plays was utilised as the teaching technique. The interviewing skills were based upon a model put forward by Lesser (1981, 1985, 1987), which focuses upon teaching GPs to respond to patients' verbal and non-verbal cues, including pitch and tone, and seeking examples of patients' presenting problems. The skills taught to the original GPs were maintained at 18-months follow up without further reinforcement (Bowman, Goldberg, Millar, Gask & McGrath, 1992). However,

the skills imparted would be considered assessment based only (i.e., interviewing skills); that is, there was no attempt to teach specific treatment strategies. Gask (1998) commented that GPs participating in psychological/ psychiatric training are typically keen to learn specific skills rather than concentrating only upon interviewing techniques, a finding also noted by others, including the author of the current work.

Gask, Usherwood, Thompson & Williams (1998) presented the results of a study investigating the efficacy of a 10-hour GP training program regarding the assessment and management of patient depression. Twenty GPs participated, and evaluations of efficacy included pre-post subjective and objective judgements by role-played 'patients', and GP satisfaction and confidence ratings. Targeted behaviour changes for trained doctors included assessment of depression symptoms, assessing suicide risk, summarising the noted symptoms of depression, and initiating simple problem-solving strategies and tasks with the patient. Following training GPs believed they were more aware of the usefulness of 'talking therapy', and were more confident about using the skills presented. 'Patients' felt better satisfied with the service they received from the trained GPs and there was a significant increase in some of the management skills targeted. The program was not successful, however, in increasing the ability of the trained GPs to conduct a systematic assessment of depression, and they failed to assess suicide risk adequately. In addition, while GPs were introduced to cognitive therapy concepts during this program, and they considered it a useful approach, they felt it was confusing, and could see no role for it in their day-to-day consultations. Again, the authors commented that because this was not a randomised controlled trial, changes noted could conceivably have been due to factors other than the training. As the first author has commented in previous studies, observations were made about the expense and methodological difficulties in conducting

such study designs in general practice when evaluating the efficacy of training. The impact of the training upon actual patients suffering depression was not investigated.

Despite the published work on reattribution training by Gask, Goldberg and colleagues, by 2000, Kroenke & Swindle (2000) concluded that the most common tactic for GPs managing somatising patients was still a “hand-holding” approach “focused more on conserving health care resources than improving patient symptoms and functioning” (p. 205). They were referring here to many GPs following recommendations by Smith and colleagues (Smith, Monson & Ray; 1986; Smith, Rost & Kashner, 1995) who compared routine GP care with their approach for managing somatising patients. Their approach involved sending a letter to primary care physicians recommending scheduling regular visits with the GP, limiting the number of subspecialty referrals and diagnostic testing, legitimatisation of the patient’s complaints, and sustained reassurance. This approach significantly reduced the health care costs and utilisation of the somatising patients compared to standard practice. However the authors did not present results for the impact of this approach upon patient symptoms or perceptions (Allen et al, 2001; Kroenke et al, 2000). Kroenke et al, (2000) state that in relation to this approach, “evidence regarding any benefit in more patient-centred measures (e.g., symptom relief, reduced illness concerns, functional status and quality of life) remains inconclusive” (p.206). In addition, difficulties have been noted with the approach being too theoretical, and GPs finding it difficult to maintain over a long period of time (Epstein, Quill & McWhinney, 1999; García-Campayo, Sanz-Carrillo, Yoldi, Lopez-Aylon & Montón, 1998; Hartz, Noyes, Bentler, Damiano, Willard & Momany, 2000).

García-Campayo, Claraco, Sanz-Carrillo, Arévalo & Montón (2002) presented results of a pilot training program for family doctors aimed at assisting in the management of patients with a DSM-IV diagnosable somatisation disorder. They transformed Smith et al.’s

approach (described above) into practical strategies, and then attempted to teach these strategies to GPs in a brief training program. They differentiate the aims of their program from the reattribution program described variously by Gask and Goldberg and their colleagues, by stating that because their program targets symptoms displayed by chronic, diagnosable somatisation disorders, it is not aimed at cure; rather its aim is to minimise iatrogenesis, and improve quality of life. Their program was of 20 hours duration, and they evaluated its efficacy in increasing the knowledge and confidence of 14 GPs in managing this presentation. They found, using pre-post training measures, that the participants felt significantly more confidence and “less stress” with regard to management of this population; they were also better able to explain the psychological and biological nature of the disorder, and emphasise the importance of stress management to actors role-playing such patients. However, there was no significant difference pre to post training in the doctors’ ability to explain to the ‘patients’ that somatisation disorder is a well-known problem, nor in their ability to “empower” the ‘patient’, refrain from blaming the patient for their illness, or instill hope for change. The authors of this study point out that the clinical efficacy of the program has not been tested because the doctors’ performance was not assessed in their naturalistic setting. In addition, any impact of this training program upon patient outcomes was not considered.

The SPHERE project in Australia aims to provide training to GPs to improve their ability to recognise and manage common mental disorders, including depression, anxiety and somatoform disorders (Naismith et al., 2001). The 12-hour GP training program component of this project involved psychiatrist-led small group seminars for GPs addressing five areas including interviewing, diagnostic assessment, pharmacological treatments, non-pharmacological treatments and implementing a disease management strategy, with an emphasis upon increasing GPs’ ability to provide a coherent explanation

of the causes and treatment of depression to patients and their families (Naismith et al., 2001, p.S43). Participants were asked to complete a pre-and post-training test, focusing upon knowledge of depression, anxiety and somatoform disorders and confidence in managing these complaints. 1008 GPs completed the pre-test and 190 completed the post-test. There was a significant improvement of participating GPs' knowledge from pre-to post-training, and 97% of GPs reported improvements in confidence (25% somewhat improved, 47% moderately improved, 25% very much improved). Another component of the project involved measuring the number of diagnoses made by a subset of participants of the training (N=57) compared to those who had not been trained. The authors found that participants of the program diagnosed a greater proportion of their patients with mental disorders than a group that did not attend the training. The trained doctors also provided mental health treatments (including pharmacological and non-pharmacological treatments) to a greater proportion of their patients than the group that did not attend the training. The study found that doctors who participated only in a feedback audit of their practice, without undertaking the training program, showed no improvement in diagnostic or management skills, despite being provided with detailed performance feedback regarding individual patients and their overall practice. Again, limitations of this study include that it was not a randomised controlled trial, and that impact of the training upon patient outcomes was not investigated.

#### **4.2.3 The need for further research in this area**

GPs are increasingly being asked to take an even greater role in managing common psychological problems in the community. For example, in the US and the UK there is increasing emphasis on the importance of the role of primary care physicians in managing 'minor mental illness', reserving specialist services for the severely mentally ill (Ratcliffe,

Gask, Creed & Lewis, 1999). This ramps up the importance of ensuring that GPs have access to quality training for managing common 'minor' mental health problems. However Gask & Rogers (1998) state, "There is a dearth of brief but effective interventions designed specifically for primary care populations rather than simply adapted from therapies derived in secondary care settings with a different group of patients and therapists" (p.541).

Naismith et al, (2001) commented that in Australia opportunities for such training are limited, and that much that is available is provided by pharmaceutical companies, which "tends to focus on drug detailing, rather than non-pharmaceutical intervention" (p. S42). The Commonwealth government of Australia has recently established a 'counselling provider number' (a new Medicare rebate for GPs who have completed approved training programs in counselling techniques). The 2001 Commonwealth Budget provided \$120.4 million over four years to improve the quality of care provided through general practice to Australians with a mental health illness. The initiative is referred to as the *Better Outcomes in Mental Health Care* initiative. The aim of the *Better Outcomes in Mental Health Care* initiative is to support general practitioners in improving the quality of care provided through general practice to Australians with a mental health illness by providing mental health education and training for general practitioners and more support for them from allied health professionals and psychiatrists (Royal Australian College of General Practitioners, 2003). However the efficacy of the approved Australian counselling programs under this initiative has not yet been sufficiently established, in particular with reference to studying the impact of the training upon GP patients. The training program upon which this study is based is one of these new approved programs under this initiative, and this study offers the first comprehensive appraisal of the efficacy of such training.

It is clear that Australian GPs need access to such a training initiative as the *Better Outcomes in Mental Health Care* initiative. In one recent Australian study of almost 40,000 patients presenting to general practice, the most common form of intervention for psychological symptoms was non-specific counselling and support; in the same study, of over 10,000 patients with the most serious disorders, only 50% received any intervention for these conditions, and of this group who were offered non-pharmacological treatment, evidence-based treatment was provided to only 27% of people (Hickie, Davenport, Naismith, Scott, Hadzi-Pavlovic & Koschera, 2001). The efficacy of training programs, such as the program that is the subject of this study, that attempt to improve these rates should be evaluated.

Developing effective mental health training programs for GPs who work with patients in the developing world is arguably even more important than for Australia, given that specialised mental health services (e.g., psychiatry and clinical psychology) may be non-existent, or at least effectively so, for many in these areas: improving the ability of primary carers to manage the mental health needs of these people offers their best hope (Goldberg, 2000).

As noted above, there have been some studies investigating the efficacy of CBT training programs for GPs, however there are limitations in the research to date. Firstly, the current author could find no randomised controlled studies that investigated the impact of training upon GP's performance following training. Secondly, there are very few studies that have investigated the impact of GP training upon patient outcomes. Combining these deficits, there have been no randomised controlled studies that investigate the impact of CBT training programs for GPs upon patient outcomes. Thirdly, much of the training that has been evaluated (with some notable exceptions, e.g., Naismith et al, 2001) has not instructed in specific, effective management skills for mental



health problems (e.g., CBT techniques). The most common self-perceived need of GPs who seek to undertake psychological/ psychiatric training is for instruction in specific skills training (Kerwick, Jones, Mann & Goldberg, 1997; Turton, Tylee & Kerry, 1995), but GPs often feel this need goes unmet when they present for training, and therefore more research is required to devise teaching packages that are satisfactory for GP education (Ratcliffe, Gask, Creed & Lewis, 1999). Even arguably the most well-researched program – the reattribution model developed and reported by Gask and Goldberg and their colleagues – places most emphasis upon interviewing and rationale skills, with little systematic instruction in effective CBT methods to reduce the physiological hyperarousal and cognitive distortions that typically result from, and contribute to the maintenance of, health-related anxiety.

Further research is also required to investigate the mechanisms of change that underlie successful treatment for patients with health related anxiety presenting to general practice. Although CBT has been found to be effective in reducing these symptoms, it has not been sufficiently established that this is due to cognitive and behavioural changes (Lidbeck, 1997; Sharpe et al., 1992). The publications in this area have not sufficiently investigated the impact of such treatment upon distorted illness-related cognitions. Kroenke & Swindle (2000) state, “evidence regarding any benefit in ... patient-centred measures (e.g., symptom relief, reduced illness concerns, functional status and quality of life) remains inconclusive” (p.206). Nezu et al., (2001) agree that further research should be conducted investigating the relationship between unexplained medical symptoms and psychological variables presumed to underlie their presentation, including personality, cognitions and coping styles.

The current thesis investigates personality traits, coping styles, illness perceptions, and psychological symptom variables (depression, anxiety and somatising symptoms), in a

group of patients presenting to Australian GPs with symptoms that are not accounted for by obvious organic illnesses (Study 1). The study also investigates whether a training program for GPs in basic CBT techniques can increase GP knowledge and confidence in these techniques (Study 2), and whether the training program impacts upon the illness cognitions of these patients (Study 3).

#### **4.3. Aims**

Study 2 aims to investigate whether a brief CBT training program enhances GP knowledge and confidence in basic CBT skills, and whether any changes are maintained in at least the short-term (six-months post training).

Although the training program aims to assist GPs to better manage patients who are anxious about their health, it is not attempting to teach treatment for any predetermined specific psychiatric condition (e.g., hypochondriasis, panic disorder, somatisation disorder). Rather, the aim is to provide doctors with a range of skills they can use with many different types of patients, who may or may not have a formal psychiatric condition, but who typically present with somatic symptoms with apparent underlying psychological symptoms.

#### **4.4. Method**

##### **4.4.1 Subjects**

Eighty-nine GPs from across Australia participated in this part of the study (pre and post training). Thirty-one GPs re-completed the questionnaires at a six-month follow-up time point. The GPs were recruited to the training program from advertisements in trade publications, and via information sent to Divisions of General Practice across the country. These advertisements were disseminated by the principal researchers through various

QLD Divisions of General Practice and The Royal Australian College of General Practice Queensland Faculty (RACGP QLD). The training was offered free of charge to these GPs, and all materials were provided free of cost. There was no funding for the study. The program was conducted in the training rooms of the RACGP in QLD. All GPs completed the training program in 2001. GPs who participated were eligible to claim continuing medical education (CME) points (45 CME points for participating in the training program and 20 Clinical Audit points for participating in the research, i.e., implementing learning in their practice after completion of the program). Identification of GPs was kept anonymous to reduce potential response bias. Informed consent was obtained from all GPs prior to participating in the program. A copy of the GP information sheet and consent form can be located in Appendix E.

#### **4.4.2 Measures**

Two questionnaires were designed to tap knowledge and confidence of key training concepts/ objectives for this phase of the project. The questionnaires were designed by the principal author of the training program. Questions were in line with the key learning objectives of the program itself; that is, the questions were designed to measure whether learning objectives had been met. All questionnaires were scored by one person – the training program coordinator – using pre-determined scoring criteria that had been developed with input from the author of the training program.

*Knowledge Questionnaire:* This 9-item written response format questionnaire assessed the GPs' knowledge of core cognitive and behavioural concepts relevant to this training program, before they participated in the program. The questionnaire was then redistributed at the conclusion of the program to determine whether the program learning objectives had been met, and whether the GPs' knowledge increased for these key

concepts. The questions that form this questionnaire with scoring procedures are listed in Appendix F.

*Confidence Questionnaire:* This is a 10-item Likert-type questionnaire that rates GPs confidence in ten skill areas covered in the program, for instance, confidence in implementing a range of arousal reduction techniques; confidence in conducting a basic behavioural assessment. The questions that form this questionnaire are listed in Appendix F.

GPs used the following Likert rating scale for each item:

1. I have no confidence in my skills in this area;
2. I feel very little confidence in my skills in this area;
3. I feel a moderate amount of confidence in my skills in this area;
4. I feel quite confident in my skills in this area;
5. I feel very confident in my skills in this area.

#### **4.4.3 The training program**

The training program aims to impart basic cognitive and behavioural principles and strategies to GPs specifically for use in general practice. It further aims to provide relatively readily-implemented management strategies for patients presenting with symptoms of anxiety or depression that typically, but not exclusively, manifests itself somatically. The author of this study developed the training program, with assistance from another clinical psychologist, and a program coordinator/ research assistant. The program is manualised, with the manual sent to participants four weeks prior to training. Pre-program reading from the manual is expected of participants. The manual forms

Appendix G. PowerPoint, role-play and video presentations, and handouts distributed throughout the program are additionally included during the actual training.

The training package distributed to participating GPs consisted of a 131-page manual and a 16-hour face-to-face training program conducted by two clinical psychologists. Groups of between six and twenty GPs form training cohorts. GPs are instructed to read the pre-training sections of the training manual prior to presenting for the workshop component of the program, which is largely skills-based. Video and live modelling, and supervised practise of the skills imparted comprises the majority of the hours spent at the workshop.

There are two major underlying models that shape the content of the training. The first is the cognitive behavioural Five Aspects of Life Experience (Greenberger & Padesky, 1995) summarised briefly below. This model is also similar to Nezu et al.'s (2001) model put forward to account for persistent medically unexplained symptoms. This model also encapsulates some of the most basic principles underpinning CBT: that our thoughts, emotions, behaviours and physical wellbeing/ reactions are interconnected and influence one another in a dynamic manner. symptoms that are clearly psychological in origin, or that cannot be explained by disease. Doctors are instructed in simple methods to intervene at each level, as indicated in the following table.

**Table 9. A summary of strategies imparted during training**

Environment	Simple problem solving strategies, time management and assertiveness instructions are provided in the form of patient handouts.
Cognitions	GPs are taught to deliver a rationale for physiological symptoms arising from emotional states; also a simple, very structured form of the ABCDE thought analysis, and common cognitive distortions are imparted.
Physical Reactions	A wide range of quickly implemented arousal reduction techniques, including breathing retraining strategies, grounding and distraction tasks, are taught. The manual clearly explains the link between emotional states and physiological arousal.
Behaviours	Basic learning principles (e.g., reinforcement and conditioning) are explained in the manual. In the workshop GPs are taught to break a problem-behaviour down considering triggers and reinforcers (basic functional analysis).
Emotions	Mood monitoring forms for patients are provided, encouraging patients to consider the environmental, cognitive and behavioural connections to their mood states.

The second model is adapted from Goldberg et al., (1989) and Gask et al., (1989) and is designed to shape thematic stages of the program into steps. The adapted model only relates to the left-hand side of the following table (that is, although the thematic elements of the model are similar, the strategies used to achieve the intended aim differ from the original authors); in addition, this model adds 'strategies to reduce the symptoms' (CBT treatment strategies) to the model.

**Table 10. Summary of framework for training program**

Helping the patient feel understood	This section consists of instruction and practice in basic rapport building, listening and questioning strategies. The aim is to ensure that the patient knows that the doctor has heard their concerns about their physical symptoms. If this is not achieved, the patient is left with fear that the GP does not believe or understand the importance of what they have said (Gask & Usherwood, 2002). There is also some evidence that somatising patients' perceived satisfaction with the GP's understanding of their problem is associated with better outcome (Downes-Grainger, Morriss, Gask & Faragher, 1998). Strategies for summarising the content of, and emotion behind, patient comments are imparted. This section of the program involves the least amount of time, as many Australian GPs have completed essentials of basic counselling and interviewing skills at other times in their learning.
Identifying psychological contributions to the presenting problem	Four models for assessing/ investigating/ quantifying problem behaviours are presented, including the Subjective Units of Distress Scale, operationalisation, and rudimentary functional analysis skills. Four common cognitive distortions are explored, and a simple cognitive analysis method is presented.
Making the link for the patient	This section of the program teaches GPs how to engage a patient to attempt some CBT skills for addressing their presenting problems. The five aspects of life experience model and a general CBT model for health anxiety (e.g., Warwick, 1989) are used to explain the links between somatic sensations and thinking, behaviours and emotions. GPs are instructed to assist the patient to reattribute faulty thoughts about physical symptoms (e.g., Goldberg et al., 1989). There is some evidence that somatising patients' perceived satisfaction with the GP's explanation of their problem is associated with better outcome (Downes-Grainger, Morriss, Gask & Faragher, 1998).
Strategies to reduce the symptoms	This section of the program imparts treatment strategies including ten arousal reduction exercises and basic cognitive restructuring.

There are also a number of sub-models for specific strategies (e.g., cognitive assessment: ABC). Learning objectives for the program form Appendix H.

The training program is accredited for General Practitioners in Australia by the Royal Australian College of General Practitioners (RACGP) and as a Level Two training program by the Mental Health Standards Collaboration.

#### **4.4.4 Procedure**

Pre-program: Four to six weeks prior to completing the workshop phase of the training program, and prior to receiving a training manual, GP participants completed the knowledge and confidence questionnaires and received a training manual, which they were instructed to read prior to attending the workshop phase of the training.

Post-training: At the conclusion of the training program (post-program) the two questionnaires were readministered. GPs then proceeded to use the interventions taught with patients presenting with health-related anxiety, details of which are presented in Study 3.

Follow-up: Six months later the knowledge and confidence questionnaires were sent again to participants, thirty-one of whom completed the questionnaires.

#### **4.4.5 Analyses**

**Pre-Post training:** To measure the impact of training upon GP knowledge, a repeated measures analysis of variance was used to compare pre- vs. post-training results for Items 1, 2, 5, 8 and 9 of the knowledge questionnaire, which were items scored on an interval scale. Items 3, 4, 6 and 7 of the knowledge questionnaire were scored on a categorical rather than an interval scale so the nonparametric McNemar chi-square test was used. In addition, because the expected frequency was low in several instances, binomial tables were used to determine corrected levels of statistical significance. The results are reported below.

The scores on each item of the confidence questionnaire were based on an interval scale and were subjected to a factor analysis (Principal Axis Factoring (PAF) with oblimin rotation). Individual raw scores were then converted to factor scores at both pre- and



post-training and all subsequent statistical analyses were based on these factors scores. To examine the overall effects of training upon GP confidence, each of the factor scores were subjected to a repeated measures analysis of variance for Time (pre vs post).

### **Six-month follow-up:**

Knowledge Measures: Items 1, 2, 5, 8 and 9 of the knowledge questionnaire were analysed within a general linear model using a repeated measures ANOVA for the Time variable, which varied at three levels (pre-program, post-program and six months follow-up). If effects for the Time factor were significant, two planned contrasts between pre-training vs. follow up, and post-training and follow-up were conducted. Categorically scored items 3, 4, 6 and 7 were translated to frequency counts which were then subjected to similar nonparametric statistical techniques described above.

Confidence measures: Follow-up data were obtained only from a proportion of GPs who had post-training data, and hence these results were evaluated separately. To measure whether the changes in confidence as a result of training were maintained across time, GP factor scores on the Confidence questionnaire were subjected to a repeated measures ANOVA for Time, which varied at three levels (pre- post- and follow-up responses). Pre- vs. post-training effects were examined in the previous section for the larger sample, and were not repeated here.

The SPSS package version 11.0 was used for all other statistical analyses. Statistical values for all significant results are reported within the thesis. SPSS output files that detail results and all values, regardless of statistical significance, are attached in e-copy in Appendix I.

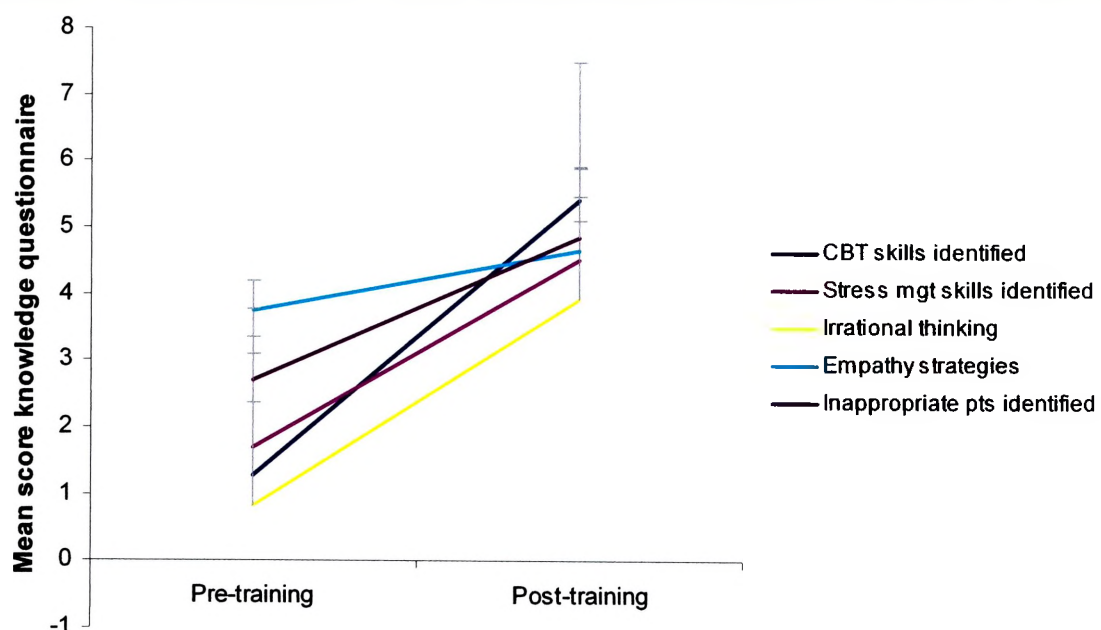
## 4.5 Results: Study Two

### 4.5.1 Pre-post results: Knowledge questionnaire

Eighty-nine GPs completed the knowledge questionnaire before and after completing the training program (100% response rate). The results in terms of means, standard deviations, and F-values for the items subjected to a repeated measure ANOVA (Items 1, 2, 5, 8, and 9) are presented in Table 11, and depicted graphically in Figure 7.

**Table 11. Pre-post training results for knowledge questionnaire (N=89)**

Item	Mean		SD		F Value
	Pre	Post	Pre	Post	
1	1.28	5.40	1.10	2.46	$F(1, 87) = 168.76$ (p. <0.001)
2	1.69	4.49	1.34	1.80	$F(1, 87) = 148.07$ (p. <0.001)
5	0.82	3.90	1.23	0.400	$F(1, 87) = 480.32$ (p. <0.001)
8	3.73	4.64	1.45	0.73	$F(1, 87) = 30.49$ (p.<0.001)
9	2.70	4.82	1.92	0.61	$F(1, 87) = 95.64$ (p.<0.001)



**Figure 7. GP knowledge questionnaire results (Items 1, 2, 5, 8, 9) before and after training**

These results indicate that GP knowledge for each of these items improved significantly pre to post training. These items measured respectively: identification of CBT skills; naming arousal reduction techniques; listing 4 irrational thinking styles; naming 5 ways empathy can be communicated; and naming 5 types of patients who may not be appropriate for a CBT intervention.

Table 12 shows the number of participants with correct and incorrect responses for Items 3, 4, 6 and 7 pre and post training, and the results of the McNemar's chi-square test.

**Table 12. Correct and incorrect responses for GP knowledge questionnaire (Items 3, 4, 6, 7) before and after training with level of significance determined by the binomial tests**

Item	Pre-training		Post Training		Significance
	Correct	Incorrect	Correct	Incorrect	
<b>3</b>	79 (88.8%)	10 (11.2%)	89 (100%)	0	p<0.001
<b>4</b>	79 (88.8%)	10 (11.2%)	89 (100%)	0	p<0.001
<b>6</b>	46 (51.7%)	43 (48.3%)	87 (97.8%)	2 (2.25%)	p<0.001
<b>7</b>	9 (10.1%)	80 (89.9%)	89 (100%)	0	p<0.001

The above items measured respectively: naming methods to stop acute hyperventilation; naming specific information required to conduct a behavioural assessment; stating the rationale for CBT; and listing specific information required to conduct a cognitive assessment.

#### 4.5.2 Pre-post results: Confidence questionnaire

Eighty-nine GPs completed the confidence questionnaire before and after completing the training program (100% response rate).

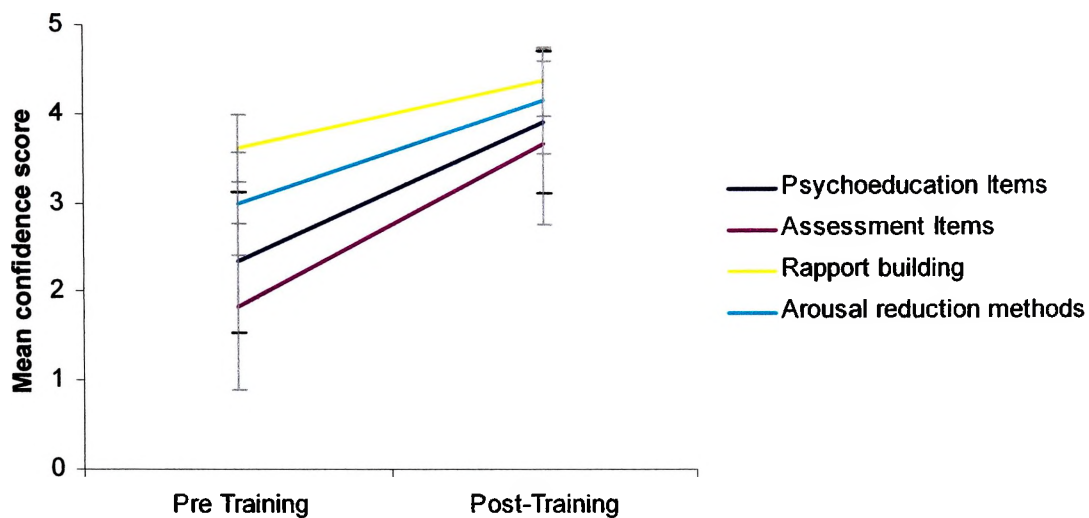
The factor analysis produced four factors. Only two of these factors were clearly multi-itemed; these factors seemed to hold reasonably over time.

- Factor 1: Is termed “psychoeducation items” indicating confidence about teaching and helping the client in a number of CBT techniques. This factor consists of 6 items, and demonstrates good internal consistency at pre-test  $\alpha_{t1} = 0.83$ ; and post-test  $\alpha_{t2} = 0.76$ .
- Factor 2: Is made up of 2 items (items 4, 5) and is termed “assessment skills”, with its items measuring confidence in using the assessment tools and has high internal consistency at pre-training  $\alpha_{t1} = 0.92$ ; and post-training,  $\alpha_{t2} = 0.93$ .

Two items (1 “helping your patient feel understood”, and 3 “managing hyperventilation”) did not load on either of the two factors and are analysed separately. Results in terms of means, standard deviations, and F-values are presented in Table 13, and Figure 8 depicts these results graphically.

**Table 13. Pre-post training results for confidence questionnaire (N=89)**

Item/ Factor	Mean		SD		F Value
	Pre	Post	Pre	Post	
<b>Factor 1</b>	2.34	3.93	0.67	0.45	$F(1,88) = 441.06, p < 0.001$
<b>Factor 2</b>	1.83	3.69	0.72	0.65	$F(1,88) = 440.41, p < 0.001$
<b>Item 1</b>	3.73	4.39	0.67	0.56	$F(1,88) = 71.87, p < 0.001$
<b>Item 3</b>	2.99	4.17	0.91	0.68	$F(1,88) = 119.630, p < 0.001$



**Figure 8. Mean GP confidence ratings before and after training**

These results indicate that GP confidence for all of the areas measured improved significantly pre to post training.

#### 4.5.3 Six-month follow-up results: Knowledge questionnaire

Thirty-one GPs completed the questionnaire at least six months after training had been completed (out of 89 asked to do so = 34.8% response rate). Table 14 presents results in terms of means, standard deviations, and F-values (Time/ Main Effect) for Items 1, 2, 5, 8 and 9.

**Table 14. Six-month follow-up results for knowledge questionnaire (N=31)**

Item	Mean			SD			F Value
	Pre	Post	FU	Pre	Post	FU	
1	1.55	5.39	2.42	1.12	2.19	1.46	F(2,29) = 39.09 (p < 0.001)
2	1.74	4.71	3.00	1.41	1.44	1.57	F(2,29) = 38.67 (p < 0.001)
5	1.16	4.00	3.06	1.34	0.00	1.32	F(2,29) = 71.64, (p < 0.001)
8	3.81	4.68	3.42	1.56	0.65	1.95	F(2,29) = 20.51 (p < 0.001)
9	3.16	4.97	3.48	1.79	0.18	1.91	F(2,29) = 12.45 (p < 0.001)

Pairwise comparisons of mean differences were conducted to determine whether mean changes across each time point were significant.

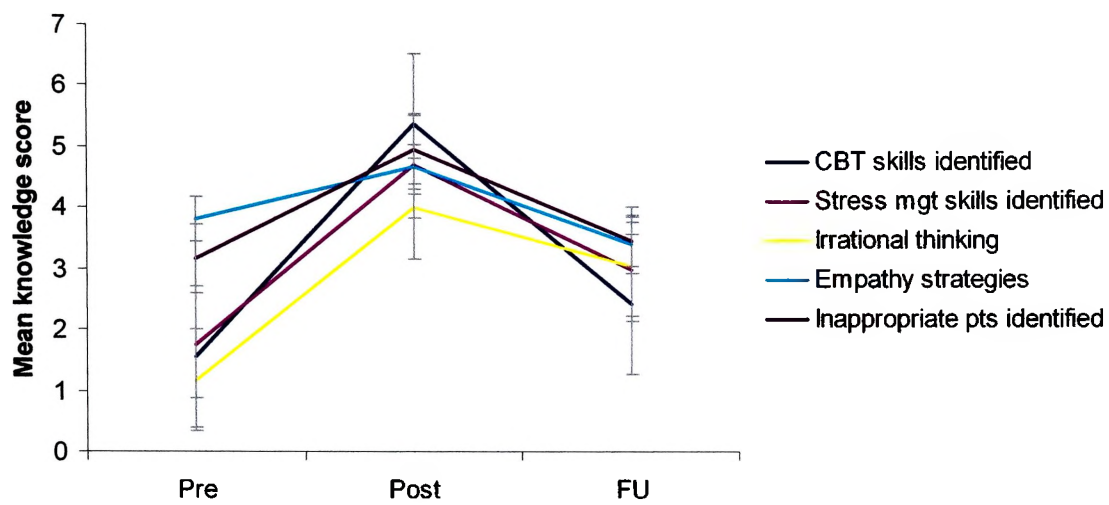
These results are presented in Table 15.

**Table 15. Pairwise comparisons of mean differences between measurement points for knowledge questionnaire**

Item	Pre-Training to Follow-Up		Post-Training to Follow-Up	
	Mean difference	p value	Mean difference	p value
<b>1</b>	-0.87	p<0.00	2.97	p<0.00
<b>2</b>	-1.26	p<0.00	1.71	p<0.00
<b>5</b>	-1.90	p<0.00	0.94	p<0.00
<b>8</b>	0.39	p=0.37	1.26	p<0.00
<b>9</b>	-0.32	p=0.45	1.48	p<0.00

The above table indicates that for all of the above items there was a significant difference between post-program knowledge and knowledge retained at follow-up, indicating a significant loss of knowledge over this period. For Items 1, 2 and 5 however, there remained a significant difference between pre-program knowledge and knowledge at the follow-up time point, indicating that a significant increase in knowledge for these items was maintained over time. For Items 8 and 9 however, knowledge levels returned to pre-program levels.

Figure 9 depicts these results graphically.



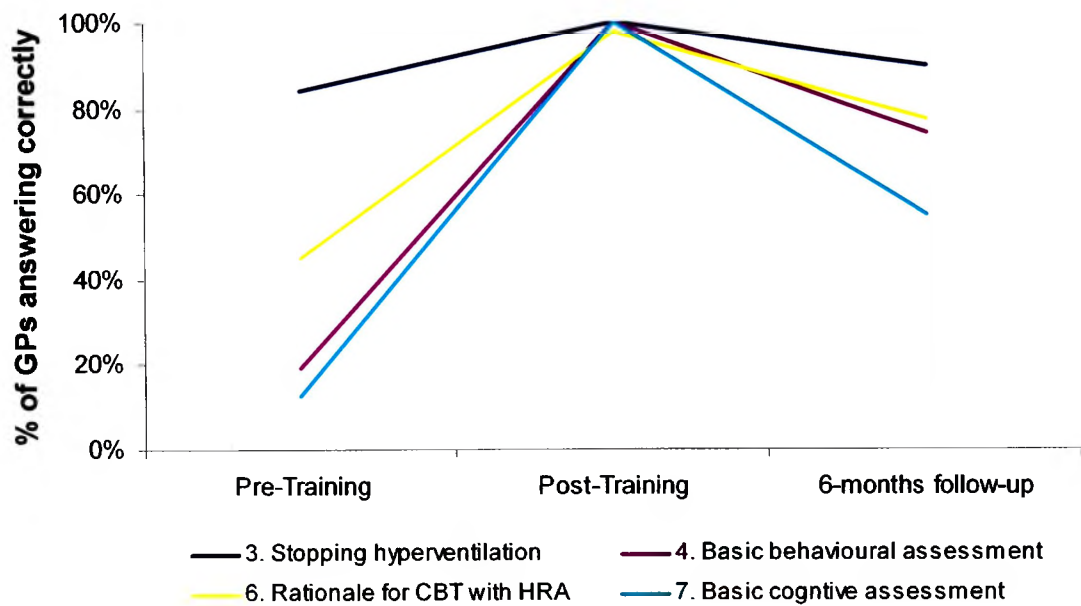
**Figure 9. Mean pre-post and follow-up results for GP knowledge questionnaire (Items 1, 2, 5, 8, 9)**

Four items (3, 4, 6, and 7) were scored on a categorical scale, and results for these items are presented in terms of percentages for pre-training, post-training, and follow-up. The nonparametric McNemar chi-square test was employed for each of these items to measure change in learning before and after the program (at the six month follow-up point), with the results reported in Table 16 and displayed in Figure 10.

**Table 16. Pre, post & follow-up results for GP knowledge questionnaire (Items 3, 4, 6, 7) with level of significance determined by the binomial tests**

Item	Percentage correct			Significance
	Pre-training (follow-up group n=31)	Post-training (whole group n=89)	Follow-up group (n=31)	
<b>3</b>	83.9%	100%	90.3%	Not significant
<b>4</b>	19.4%	100%	74.2%	p<0.001
<b>6</b>	45.2%	97.8%	77.4%	p<0.001
<b>7</b>	12.9%	100%	54.8%	p<0.001

Figure 10 presents these results graphically.



**Figure 10. Percentage of GPs answering knowledge questionnaire correctly (Items 3, 4, 6 and 7) at pre and post-training and 6-months follow-up**

The above table indicates that the knowledge levels for the hyperventilation item remained similar across all of the time points. For the remaining three items a significant difference remained between pre-program knowledge and knowledge retained at follow-up, indicating a significant amount of learning was maintained for these items over this period.

#### **4.5.4 Six-month follow-up results: Confidence questionnaire**

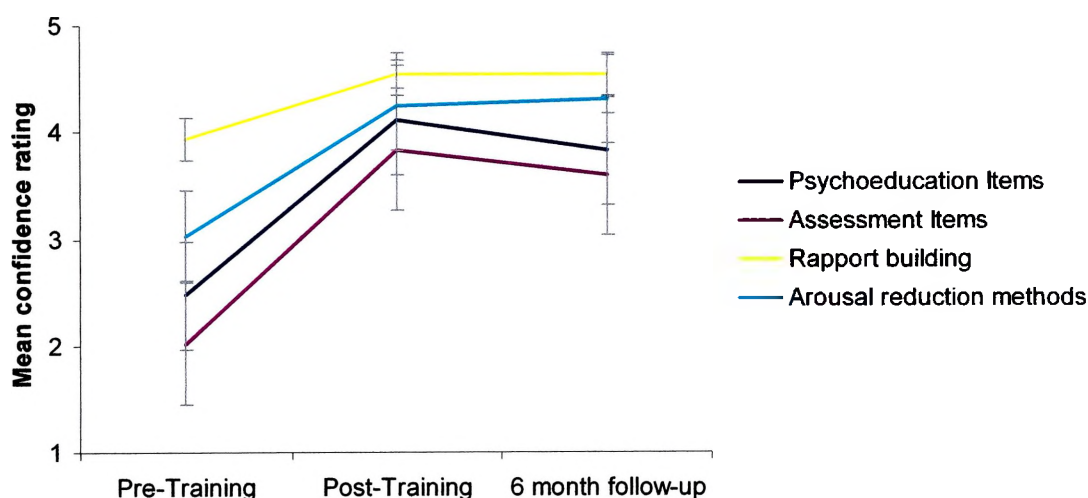
Thirty-one (34.8%) of 89 GPs completed the confidence questionnaire again at least six months after training. Results in terms of means, standard deviations, and F-values are presented in Table 17, and indicate that all improvements in confidence were maintained at the six-month follow up point.



**Table 17. Six-month follow-up results for confidence questionnaire (N=31)**

Item/ Factor	Mean			SD			F Value
	Pre	Post	FU	Pre	Post	FU	
<b>Factor1</b>	2.47	4.12	3.83	0.78	0.41	0.65	F(2,29) = 74.00, p < 0.001
<b>Factor2</b>	2.02	3.84	3.61	0.75	0.57	0.75	F(2,29) = 83.03, p < 0.001
<b>Item 1</b>	3.94	4.55	4.55	0.73	0.51	0.51	F(2,29) = 10.69, p < 0.001
<b>Item 3</b>	3.03	4.26	4.32	0.71	0.63	0.75	F(2,29) = 51.51, p < 0.001

Figure 11 summarises these results graphically.



**Figure 11. Self-ratings of GP confidence in basic rapport building as a result of training**

#### **4.5.5 Summary of findings: Study 2**

These results demonstrate clearly that the training program increased GP knowledge and confidence pre to post program for all key learning areas. However, at 6-months follow-up, although confidence levels were maintained, there were significant reductions in knowledge retained. Despite this drop in GP performance, some of the acquired knowledge was retained at follow-up, with the exception of two items namely, Item 8:

stating methods by which empathy can be communicated, and Item 9: listing types of patients who may be inappropriate for a CBT approach; with results for these Items not significantly different between follow-up to pre-program results. With regard to Item 3, GP performance remained high at each of the 3 time points.

#### **4.6 Discussion Study 2: Efficacy of GP training upon GP knowledge and confidence**

This study investigated the efficacy of a brief CBT training program in increasing GP knowledge and confidence in basic CBT skills for managing health-related anxiety. The study found that the program was effective in increasing GP participants' knowledge of core learning objectives, and confidence in using the skills imparted in the program.

**Effect of training:** After completing the training, GPs were able to identify significantly more CBT skills, methods of communicating empathy, and stress management techniques than they were prior to training. After training, 100% of participants were able to correctly detail how to stop a patient hyperventilating during a panic attack, and detail the information required to complete a basic behavioural assessment and a basic cognitive assessment. Approximately 98% of GPs were able to correctly detail the CBT rationale for treating health related anxiety (compared to approximately 52% prior to training). After completing training, GP participants were also significantly better able to list common cognitive distortions and identify patients who would not be appropriate for CBT.

**Retention of learning:** Results clearly indicate that there was a significant drop in retention of learned material from post-training to follow up. This occurred in each of the areas examined. However, despite the significant drop off in knowledge six months after training, GPs' knowledge at follow-up was still superior compared to pre-training levels for items 1 through 7. These items measured: identification of CBT skills; identification of arousal reduction techniques; stating how to stop hyperventilation during a panic attack; stating information required during a basic behavioural assessment; listing irrational thinking styles; stating the basic rationale for CBT in managing health-related anxiety; and stating information required to conduct a basic cognitive assessment. There were two

clear exceptions to this maintenance of learning over time, including in the ability to identify methods of communicating empathy (Item 8), where at six months post training, knowledge returned to pre-training levels. As indicated earlier, instruction in basic counselling skills was least focused upon during this training program, and this might account for the return to baseline knowledge levels in this area. The second area where GP knowledge returned to pre-training levels was in identifying patients who are may not be suitable for a CBT approach (Item 9). It was noted that percentage correct scores for Item 3 (stating how to stop hyperventilation during a panic attack) were high at all time points (pre-program: 83.9%; post-program: 100%; follow-up: 90.3%), indicating that most GPs in this study already had strong knowledge for this item.

These follow-up findings strongly imply that booster, refresher, and/or supervision sessions are important for maintenance of GP learning in this area over time. Follow-up rates at this time point may even underestimate this forgetting problem – it is possible that those GPs who dropped out of the follow-up study had lower retention rates than those who participated at this time point, and differences between those who were followed up and those who were not should have been better measured, although there are numerous possible reasons for GP drop outs, including, but not restricted to a general lack of time for busy GPs to participate, and competing demands from other continuing professional development activities. The brief follow-up period and small numbers at follow-up are significant limitations of this study, and limit the inferences regarding efficacy that can be drawn. This study would also have been improved if further demographic details about the GPs were collected and compared (e.g., past experience in mental health training and/or CBT specifically).

**Impact of training on confidence:** GPs felt significantly more confident about being able to assist their patients to feel understood after they completed the program, and in spite of

the drop off in their knowledge of methods of communicating empathy six months after the program, at this follow-up time point they still felt confident in using the basic listening skills imparted during the program. GPs also felt significantly more confident about being able to manage hyperventilation during a panic attack, and conduct a basic behavioural and cognitive assessment after they completed the program compared to prior to attending, and this confidence was maintained for at least six months. GPs felt more confident in being able to teach a range of CBT skills after training, including: teaching a wide range of arousal reduction methods; identifying the features of at least four common irrational thinking styles; educating patients about the psychological contribution to many physical complaints; identifying patients who would benefit from cognitive and behavioural strategies to address their health-related anxieties; challenging irrational thinking in relation to health-related anxieties; and helping patients re-frame irrational statements to more neutral ones. All of these improvements in confidence were maintained at the six-month follow up point.

The mismatch between knowledge and confidence scores at six-months follow-up highlights the need for refresher training or supervision, in that while there was no drop off in GPs' expressed confidence in their ability to use the skills taught, there was a drop off in their knowledge of these areas over time.

Future studies measuring knowledge and confidence in core CBT skills should endeavour to use a standardised assessment tool to measure outcome. The fact that the tool used in this study was idiosyncratic for this particular program, and may contain psychometric flaws, is a limitation of this study.

Two deficits in published research to date regarding the efficacy of psychosocial training programs designed for general practitioners is the lack of randomised controlled designs in the studies, and failure to investigate the impact of GP training upon the outcomes of

their patients. Studies that have investigated the latter have largely been pessimistic in their outcome. This, perhaps, should not be surprising, given that even treatment with such patients conducted by experienced, often highly trained, mental health professionals has been equivocal with regard to outcome, especially when treating depression (see Section 4.1.2). The emphasis of the current study was not upon teaching GPs to single-handedly treat established psychiatric disorders, but upon training them to educate their patients about the nature of somatised psychological symptoms, and instruct in some rudimentary strategies to reduce them. What seems most important to the current author is that all GPs are able to effectively impart to patients who have unfounded anxiety in relation to their health, that their symptoms do not represent organic pathology. Simply telling a proportion of patients that they are not sick is not enough – patients require a convincing, intuitively logical explanation for what produces their very real physical symptoms, rather than simply being told that there is ‘nothing wrong’. Further, in line with cognitive behaviour therapy, GPs should be able to teach some simple, effective strategies (e.g., controlled breathing techniques) that will reduce the symptoms (e.g., subthreshold hyperventilation symptoms), to ‘prove’ their rationale of what has caused the symptoms. It seems logical that such an approach, delivered at the first point of call to anxious patients, may prevent the anxious rumination, constant checking, avoidant behaviours, reassurance seeking, and escalation of physiological arousal that may later manifest in panic attacks, hypochondriacal thinking and behaviours, and even depressive and anxiety disorders.

Study 2 was not a randomised control design, and future studies of knowledge and confidence in CBT skills should employ a control group. The next study investigates the impact of GP consultations generally upon such patients, this time employing a randomised control trial, and it specifically examines whether this training program has any additive impact upon patient outcomes.

## **5. Study Three: Investigating the impact of GP intervention and GP training upon health-related anxiety patients**

### **5.1. Aims**

There are two aims for this phase of the project, both concerning measurement of the impact of GPs consultations upon patients presenting with somatic symptoms that are unexplained by medical pathology. Specifically, Study Three aims to:

- i. Investigate the impact of GP consultations upon the patient's:
  - o Level of anxiety, depression, and somatisation;
  - o Coping strategies; and,
  - o Cognitions about their symptoms.
- ii. Investigate the impact of the cognitive behavioural GP training program upon these patients; that is, utilising a randomised control design, determining whether there is any difference in the above variables when patients have consulted GPs who have been trained in the basic CBT program.

### **5.2. Method**

#### **5.2.1 Subjects**

Patients in Study 1 who had presented to a subgroup of the GPs in Study 2 (thirty-one GPs took part in Study 3) formed the subjects in this part of the study. Patients were asked to complete and return questionnaires at two separate time points in this study, and there was some drop off in response rate. At Time 1, 66 patients participated in the study. By Time 2, 49 patients completed and returned the questionnaires. Consent and Information forms for patients are located in Appendix C.

As GPs registered for the training program, they were allocated (A – B) to one of two training dates. Patients recruited by GPs allocated to the first training date formed the Experimental Group; that is, their doctors had completed the training program (Time 1, n= 25; Time 2, n=17). Patients of GPs allocated to the second training date formed the Pre-Training Control Group; that is, their doctors had *not* yet completed the training program (Time 1, n=26; Time 2, n=17). GPs of patients who had formed this group later completed the training program, and recruited a new set of patients who met study criteria. This group of patients is referred to as the Post-Training Control Group (Time 1, n=15 Time 2; n=15).

As indicated in Study 1 (see Section 3.2.1), the average age of patients in the study was 42 years (range: 18 – 73 years). Forty patients were female and 21 male. Five participants did not list their age or sex. T-tests revealed no significant age differences between the groups. Patients were recruited by their GP into the study if they presented with anxiety about physical symptoms, and were excluded from the study if medical tests confirmed any organic pathology (e.g., illness or disease) that accounted for the symptoms.

### **5.2.2 Measures**

The measures used for this phase of the project are the same as for Study 1. At Time 1, patients completed:

- A questionnaire that asked them about their perceptions of their symptoms (*Illness Perception Questionnaire – Revised; IPQ-R*, Moss-Morris et al., 2002);
- A questionnaire that asked whether they have experienced a checklist of psychological symptoms (*Brief Symptom Inventory; BSI*, Derogatis, 2000); and,



- A questionnaire that asked about their typical coping styles (*The COPE Scale*, Carver, et al., 1989).
- They were also asked to complete a brief personality inventory (*NEO-Five Factor Inventory*, Costa & McCrae, 1992).

These inventories are discussed further in Section 3.2.2. Copies of the questionnaires form Appendix A.

For Study 3, the *IPQ-R*, *BSI*, and *COPE Scale* were re-completed by patients at Time 2, a week after they had been seen by their GP, in order to determine whether there was any change in patient illness perceptions, levels of psychological distress or coping styles as a result of consulting their GP; and/or as a result of their GP completing the training program outlined in Study 2.

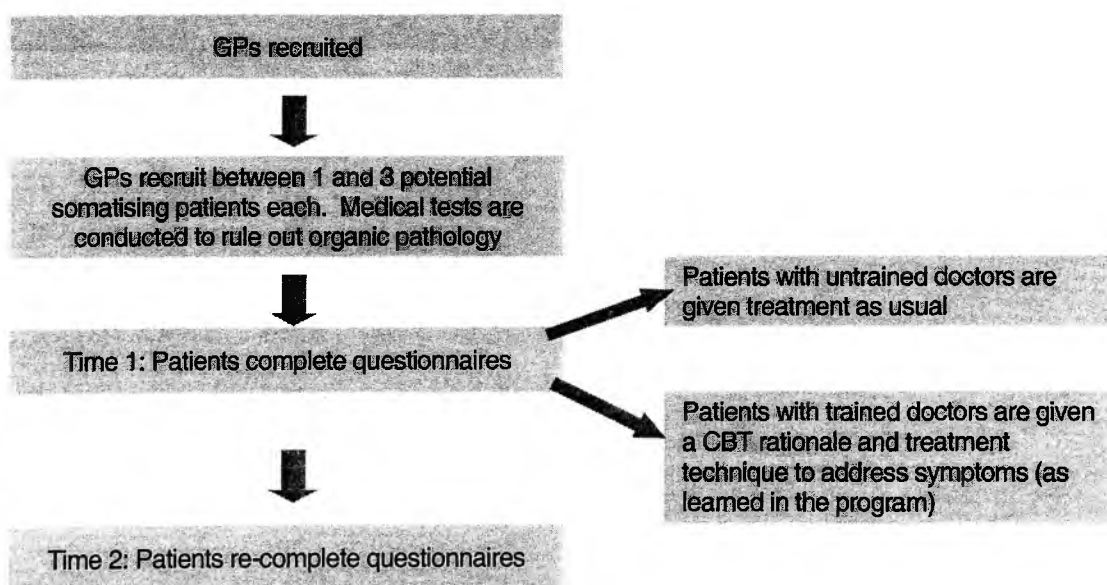
### **5.2.3 Procedure**

The GPs who participated in Study 3 (N=31) were recruited via advertisements for the training program (see Section 4.4.1 for further information about recruitment of GP participants). GPs who applied to complete the training program understood that they would be asked to participate in a research study and must be available to complete the training on one of two weekends (to ensure random allocation to groups). Details of the ethics approval process for this project forms Appendix J.

As indicated in Study 1, participating GPs were asked to recruit between one and three patients who presented with symptoms that could be accounted for by anxiety (standard medical tests ruled out any obvious organic pathology that could have given rise to the symptoms). Patients completed the *NEO-FFI*, *IPQ-R*, *BSI* and the *COPE Scale* at home after consulting their doctor complaining of the somatic symptoms (Time 1). Patients re-

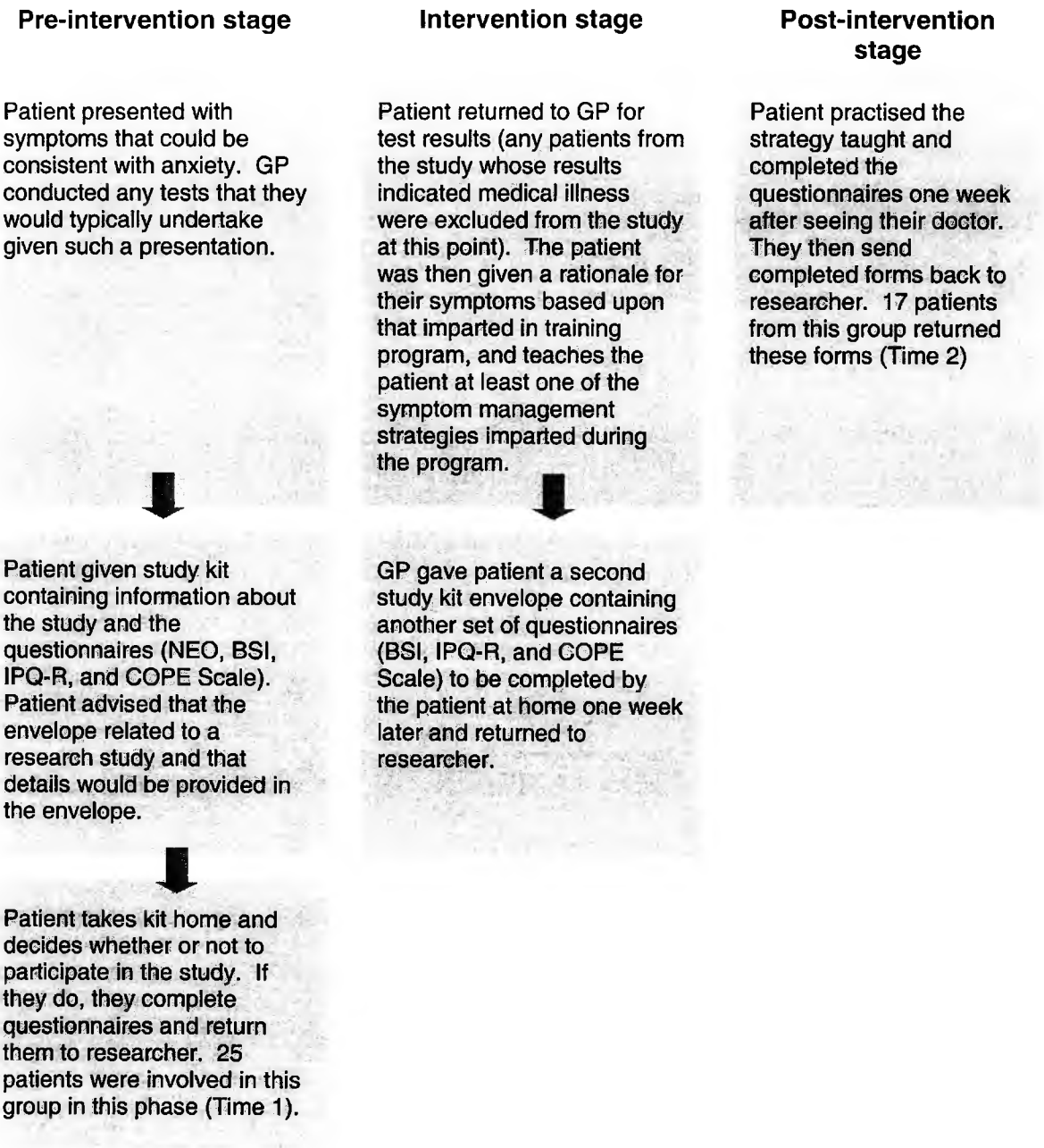
completed the *IPQ-R*, *BSI* and the *COPE Scale* questionnaires approximately one week later after having returned to their GP to obtain results of any medical tests (all of which were negative for their data to have been included in the study) (Time 2).

Patients in the Pre-Training Control Group were consulting GPs who had not undergone the training. Their GP was instructed to manage their case as they normally would. Pre-Training Control Group patients completed the questionnaires at Time 1 (after first presenting), and Time 2 (after returning for negative test results). Patients in the Experimental Group were consulting GPs who had completed the training. Their GP was instructed to give their patient a cognitive-behavioural rationale for the presenting physical symptoms when the patient returned for their (negative) test results. They were also instructed to teach the patient at least one cognitive or behavioural technique from the program to manage the symptoms. Experimental Group patients completed the questionnaires at Time 1 (after first presenting), and Time 2 (after returning for negative test results, and being managed using the CBT approach). A simple graphic summary of the procedure for this part of the study is presented below, and Table 18 presents each stage in greater detail.



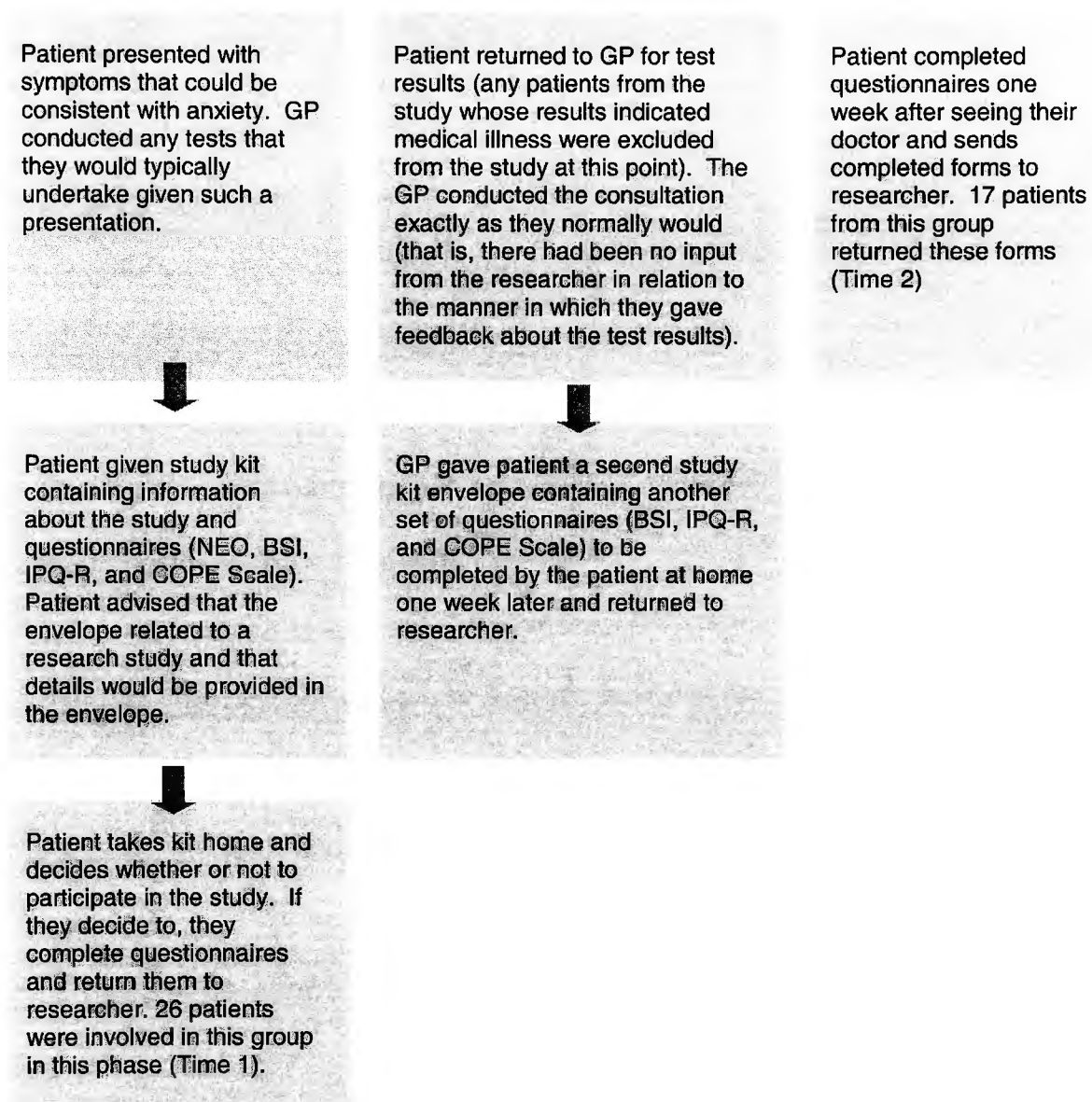
**Table 18. Summary of procedure: Study 3**

**Experimental group (patients consulting trained GPs)**



**Table 18. Summary of procedure: Study 3 (continued)**

**Pre-Training Control group (patients consulting untrained GPs)**



When Pre-Training Control Group GPs had been trained, they completed the same procedure as for the Experimental Group with an entirely new set of patient subjects.

This group is referred to the Post-Training Control Group.

The names of all patients involved in the study were kept confidential. GPs recorded patient initials, and all questionnaire kits distributed to GPs were coded so that returned forms could be traced to individual doctors at the various stages of the study.

#### 5.2.4 Analyses

To examine the overall effects of training, patients treated by trained GPs (Experimental and Post-Training Controls) were compared with patients of untrained GPs (Pre-training Controls). If significant main or interaction effects were obtained for training, an additional comparison between the pre- and post-training Control groups was conducted to determine whether the overall differences associated with training remained when GP variability was controlled, namely by looking at data for the same group of GPs. These group comparisons were made for the *BSI*, *IPQ* and *COPE* scores as detailed below. A repeated measures ANOVA was used for all analyses. Most comparisons were planned and effects were based on one degree of freedom. Occasionally, when this was not the case, and sphericity was significant, the Greenhouse Geiser correction was used. The SPSS package version 11.0 was used for statistical analyses. Statistical values for all significant results are reported within the thesis. SPSS output files that detail results and all values, regardless of statistical significance, are attached in e-copy in Appendix I.

- *BSI*: Scores were subjected to a 2 Group (Trained vs. Untrained; Pre- vs. Post-training) X 2 Time (Before vs. After intervention) x 3 Subscale (Depression, Anxiety and Somatisation), repeated measures ANOVA, with repeated measures for the last two factors.
- *IPQ-R*: Total scores on 5 dimensions including Personal Control, Consequences, Treatment Control, Emotional Representations and Illness Coherence were of interest for this study. Each of these dimension scores was subjected to a 2 Group (Trained vs. Untrained; Pre- vs. Post-training) X 2 Time (Before vs. After intervention) repeated measures ANOVA with repeated measures for the Time factor.

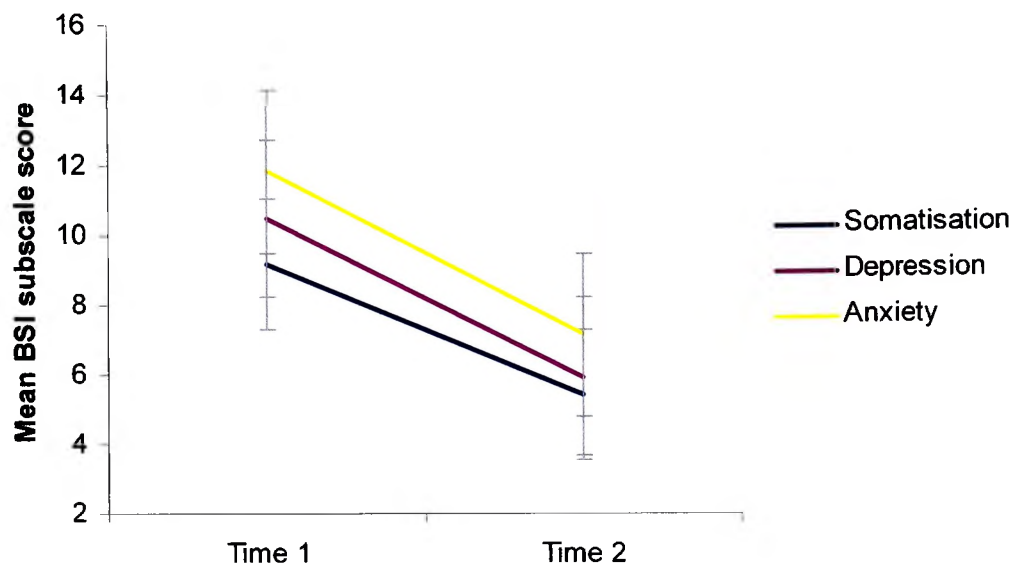
- *COPE Scale*: Total scores on the three Ben-Zur (1999) factors (Problem-Focused Coping, Emotion-Focused Coping, Avoidance-Disengagement Coping), and three subscale dimensions including Positive Reinterpretation and Growth, Focusing-on and Venting of Emotions and Denial were of interest for this study. Each of these dimension scores was subjected to a 2 Group (Trained vs. Untrained; Pre- vs. Post-training) X 2 Time (Before vs. After intervention) repeated measures ANOVA with repeated measures for the Time factor.

Power analysis: The computed power analysis indicated that for a confidence level of 0.95 and desired power of 0.90, a sample size of 66 would only allow detection of effect sizes of no less than 0.40. Such a modest effect size was expected within this study, and although a larger sample would have been ideal, the sample size was considered justifiable for the study.

### **5.3 Results: Impact of GP training on illness perception, coping and psychopathology of patients with health-related anxiety**

#### **5.3.1 BSI (Depression, anxiety and somatisation)**

A significant Time main effect was detected  $F(1,43) = 49.11, p < 0.001$ , indicating that scores on all subtests of the *BSI* reduced as a result of patients consulting their GP. Figure 12 depicts this result.



**Figure 12. Mean BSI subscale scores at Time 1 and Time 2**

No significant difference was noted between groups on the *BSI* subscales  $F(1,43) = 0.495$ ,  $p = 0.613$  and no significant interaction between Time and Group was detected  $F(1,43) = 0.044$ ,  $p = 0.957$ , indicating that there was no impact of GP training upon their patient's scores on the *BSI* subscales. Table 19 presents the means and standard deviations upon which these results are based.

**Table 19. Mean *BSI* Somatisation, Depression and Anxiety subscale scores at Time 1 & 2**

	Somatisation		Depression		Anxiety	
	Time 1	Time 2	Time 1	Time 2	Time 1	Time 2
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Experimental (N=17)	9.29 (5.27)	5.47 (5.04)	11.94 (7.60)	6.82 (5.73)	13.24 (6.79)	8.53 (6.84)
Pre Training Control (N=15)	9.27 (4.08)	6.53 (3.44)	9.53 (5.96)	4.67 (4.30)	11.07 (5.09)	6.27 (4.79)
Post training Control (N=14)	9.00 (5.75)	4.29 (4.93)	9.79 (7.62)	6.29 (4.27)	11.00 (7.80)	6.50 (4.40)
Totals	9.20 (4.96)	4.56 (4.37)	10.50 (7.05)	5.96 (4.85)	11.85 (6.57)	7.17 (5.52)

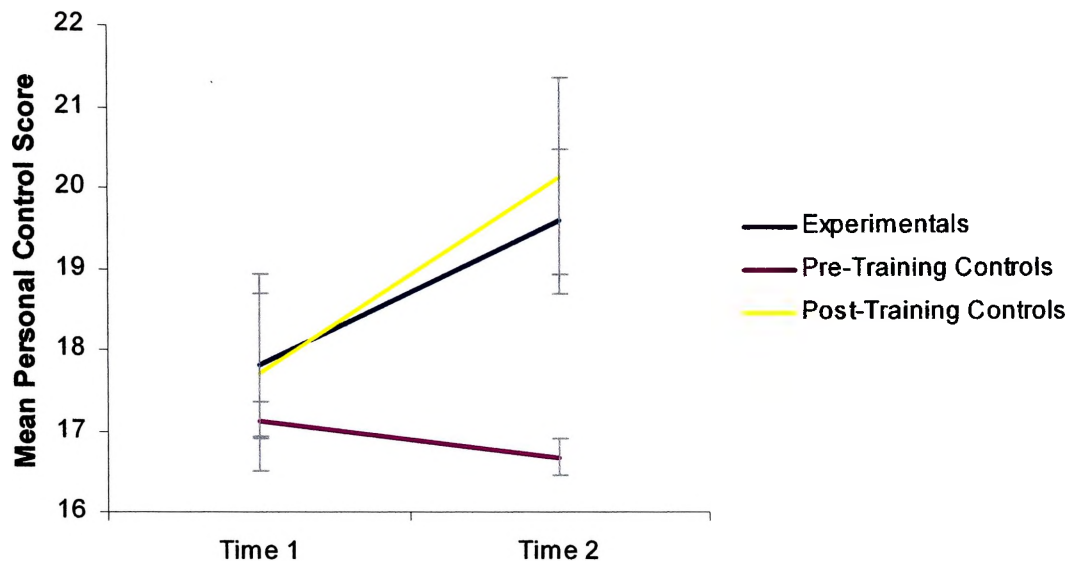
### 5.3.2 IPQ-R (Illness perceptions)

Means and standard deviations for the IPQ-R subscales are presented in Appendix K. A summary of the results for each subscale follows (for non-significant values see Appendix K).

*Personal Control:* There was no significant overall Time effect noted for either of the trained versus untrained group comparisons, however the main effect for Group {combined Trained Group vs. Pre-Training Control Group:  $F(1,44)=9.22$ ,  $p=0.004$ } and the Group x Time effect:  $F(1,44)=5.89$ ,  $p=0.019$  were significant. That is, there was a significant increase in perception of personal control in both Trained Groups compared to no change for the Pre-Training Control Group, indicating that the GP training program significantly increased patients' perceptions that they could personally positively impact the course of their illness.

A separate comparison between the Pre-Training vs. Post-Training Control groups demonstrated that these results were replicated when GP variability was controlled, with similar main and interaction effects emerging as significant [for Group,  $F(1,27)=7.66$ ,  $p=0.010$ ; for Group x Time,  $F(1,27)=4.32$ ,  $p=0.047$ ]. These results are illustrated in the following figure.

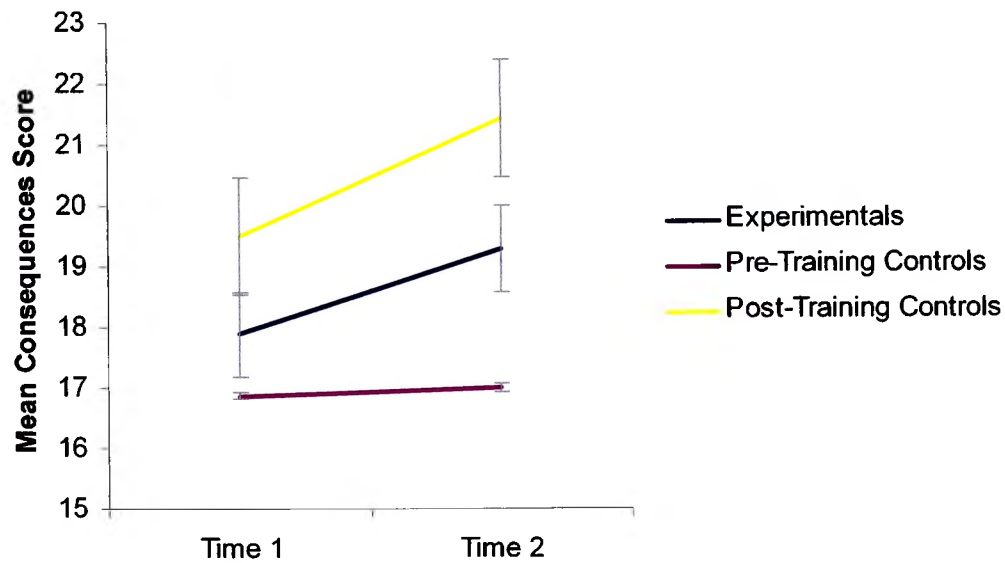




**Figure 13. IPQ-R Personal Control scores for the groups at Time 1 and Time 2**

*Consequences:* There was no significant overall Time effect noted for either of the trained versus untrained group comparisons, nor for the Group x Time effect, however the main effect for Group {combined Trained Group vs. Pre-Training Control Group:  $F(1,44)=4.27, p=0.045$ } was significant.

These results indicate that when scores were collapsed over the time factor, patients in the trained groups had significantly higher scores on this subscale than patients in the untrained group, but because these effects were not influenced by Time, there was no significant impact upon their responses as a result of training. These results are illustrated in the following figure.



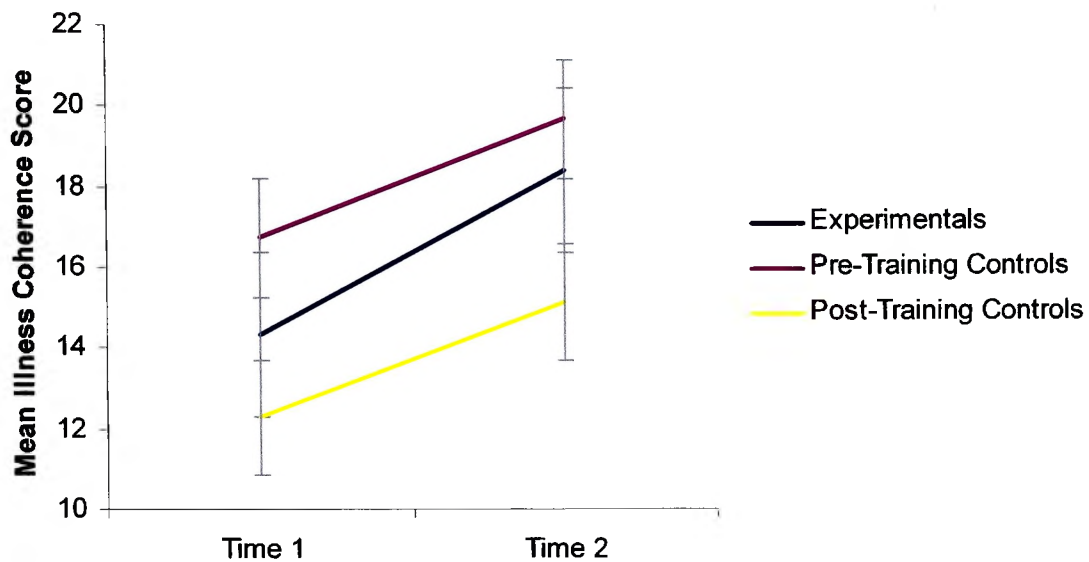
**Figure 14. IPQ-R Consequences scores for groups at Time 1 and Time 2**

*Treatment Control:* No significant effects were noted on this subscale.

*Illness Coherence:* There was a significant overall Time effect noted (combined Trained Group vs. Pre-Training Control Group:  $F(1,44)=16.66$ ,  $p=0.001$ ), and for the main effect for Group:  $F(1,44)=7.64$ ,  $p=0.008$ . There was no significant Group x Time effect.

These results indicate that all groups had a significantly better understanding of their symptoms following their interaction with their GPs, and also show that the groups generally responded differently on this subscale, with the Pre-Training Control group beginning and ending with a significantly higher score on this factor than the Post-Training Control group. A separate comparison between the Pre-Training vs. Post-Training Control groups demonstrated that these results were replicated when GP variability was controlled, with similar effects emerging as significant [for Time,  $F(1,27)=9.30$ ,  $p=0.005$ ; for Group,  $F(1,27)=16.38$ ,  $p<0.001$ ].

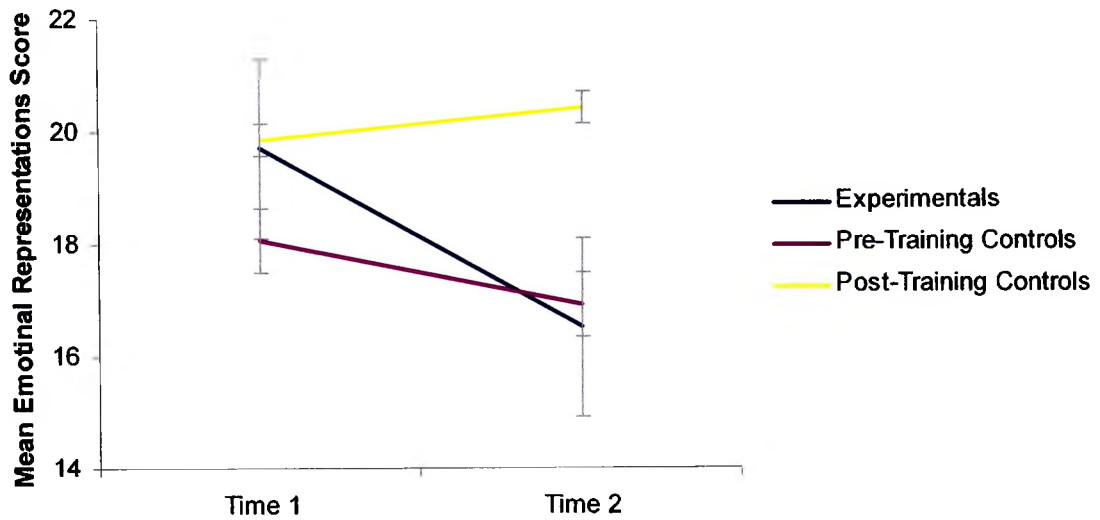
These results are illustrated in the following figure.



**Figure 15. IPQ-R Illness Coherence scores for groups at Time 1 and Time 2**

*Emotional representations:* There was a significant overall Time effect noted (combined Trained Group vs. Pre-Training Control Group:  $F(1,44)=4.39$ ,  $p=0.042$ ) There was no significant main effect for Group, or Group x Time effect. These results indicate that there was a general reduction in emotional distress about symptoms following patient interaction with their GPs.

These results are illustrated in the following figure.



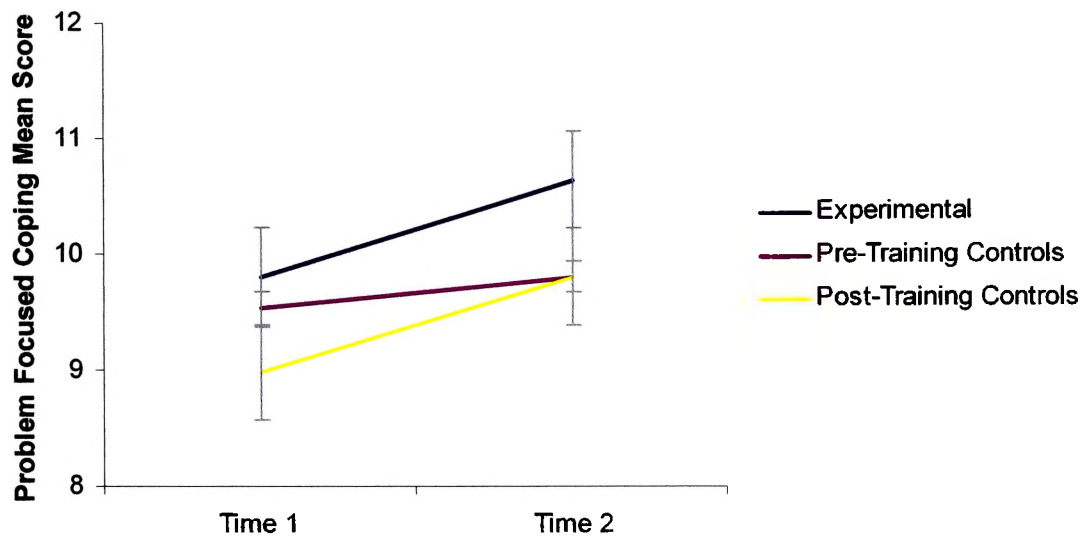
**Figure 16. IPQ-R Emotional Representations scores for groups at Time 1 and Time 2**

### 5.3.3 COPE Scale

A summary of results on this scale follows (for full tabulated results see Appendix L).

- *Factor 1 Problem-Focused Coping:* A significant overall Time effect was noted  $F(1,44)=6.175, p=0.017$ . There was no significant main effect for Group or Group x Time effect detected.

These results indicate that all groups reported an increase in problem-focused coping as a result of consulting their GP, with no significant impact made as a result of training. These results are depicted in the following figure.



**Figure 17. COPE Scale Problem Focused Coping scores for groups at Time 1 and Time 2**

- *Factor 2 Emotion-Focused Coping:* No significant overall Time effect was noted for either of the trained versus untrained group comparisons. A significant main effect for Group was detected  $F(1,44)=4.564$ ,  $p=0.038$ . There was no significant Group x Time effect detected.

A separate comparison between the Pre-Training vs. Post-Training Control groups demonstrated that these results were replicated when GP variability was controlled: Group,  $F(1,27)=9.094$ ,  $p=0.006$ .

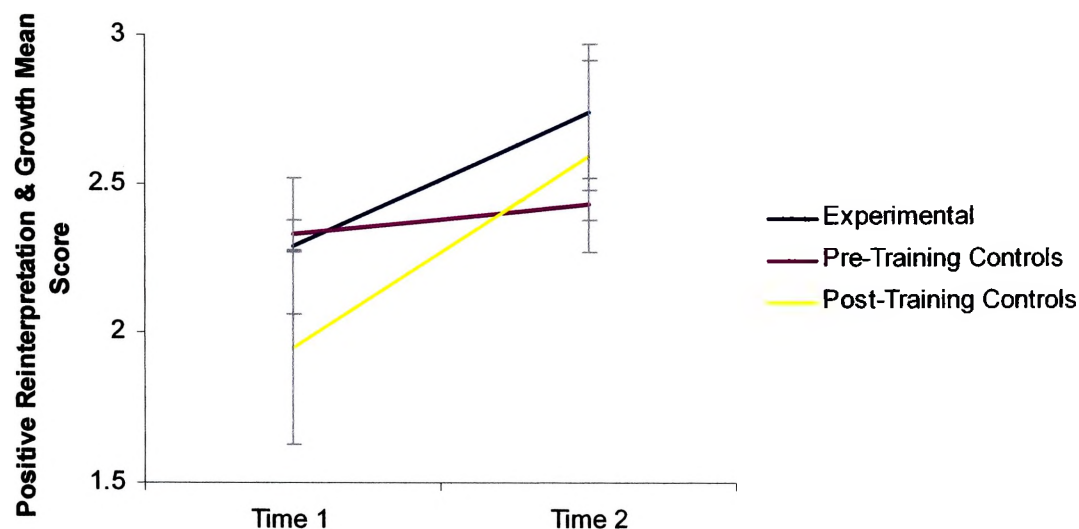
These results indicate that when scores were collapsed over the Time factor, patients within the trained groups evidenced lower levels of emotion-focused coping, but the group difference was unrelated to either GP intervention or training.

- *Factor 3 Avoidance-Disengagement Coping:* No significant effects were noted here.

It was considered that three individual COPE items of particular relevance to this study would be analysed in addition to the above factors: *Positive Reinterpretation and Growth*, as this relates to cognitive reappraisal of a stressor, a skill one would hope would increase following a CBT rationale for symptoms; *Focusing on and Venting of Emotions* relates to distress and emotionality, and *Denial* was chosen because of comments in the coping literature about the import of this strategy in effective or maladaptive coping (further discussion follows these results).

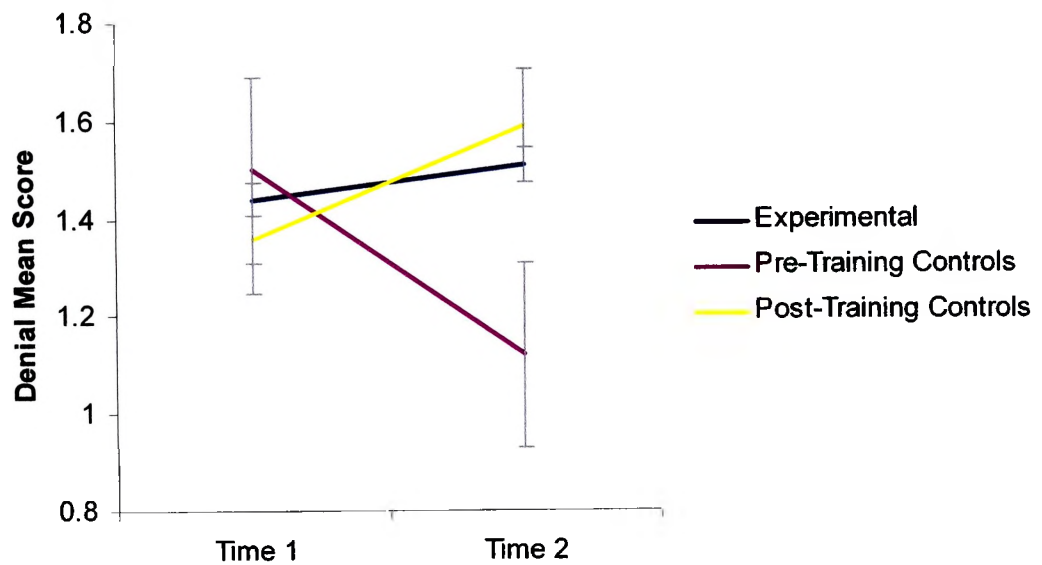
- *Positive Reinterpretation and Growth: Positive Reinterpretation and Growth*: A significant overall Time effect [combined Trained Group vs. Pre-Training Control Group:  $F(1,44)=12.985$ ,  $p=0.001$ ] and Group x Time effect [ $F(1,44)=6.069$ ,  $p=0.018$ ] was observed. No main Group effect was noted.

These results indicate that there was a significant increase in using positive reinterpretation coping strategies after patients consulted GPs, with this effect being particularly marked in the trained group and relatively minimal in the untrained group. A separate comparison between the Pre-Training vs. Post-Training Control groups demonstrated that these results were replicated when GP variability was controlled, with similar Time and group interaction effects emerging as significant [for Time,  $F(1,27)=7.66$ ,  $p=0.010$ ; for Group x Time,  $F(1,27)=4.32$ ,  $p=0.047$ ]. These results are illustrated in the following figure.



**Figure 18. COPE Scale Positive Reinterpretation & Growth scores for groups at Time 1 and Time 2**

- *Focusing on and Venting of Emotions:* A significant overall Time effect was noted: combined Trained Group vs. Pre-Training Control Group:  $F(1,44)=3.904$ ,  $p=0.054$ ]. No main Group effect or Group x Time effect was noted. These results indicate there was a significant decrease in the use of coping strategies that involved focusing on and venting of emotions when patients consulted their GP without considering whether they were trained or untrained. There was no effect of training observed.
- *Denial:* No significant overall Time effect or group effect was noted, however a significant Group x Time effect [ $F(1,44)=7.953$ ,  $p=0.007$ ] was observed. These results indicated there was a significant decrease in using denial by patients who had consulted untrained GPs when compared to those who had consulted trained GPs. A separate comparison between the Pre-Training vs. Post-Training Control groups demonstrated that these results were replicated when GP variability was controlled, with the group interaction effect emerging as significant:  $F(1,27)=7.563$ ,  $p=0.011$ . These results are depicted in the following figure.



**Figure 19. COPE Scale Denial scores for groups at Time 1 and Time 2**

#### **5.4 Summary of findings: Study 3**

This study found that, regardless of training status, GP consultation and GP reassurance about test results produced significant improvements in patient measures of psychological functioning. This could be interpreted as spontaneous recovery; however given that these results were not found with the control groups, it is considered this is an effect of training. General levels of patient anxiety, depression and somatisation dropped significantly (measured by the *BSI*), as did their specific distress about their symptoms, along with a corresponding increase in their understanding of these symptoms (measured by *IPQ-R* Emotional Consequences 1 and Illness Coherence subscales respectively). Reports of significantly more adaptive coping strategies was also noted, including an increase in positive, constructive coping strategies (*COPE*: Problem-Focused Coping factor and Positive Reinterpretation and Growth subscale), and a decrease in focusing upon worry (*COPE*: Focusing-on and venting Emotions subscale).



When these patients consulted GPs who had been trained to provide feedback and instruction from a cognitive-behavioural perspective, there was an additive effect in that they felt significantly more personally able to control their symptoms and impact upon their course and severity than patients consulting untrained GPs (measured by *IPQ-R* Personal Control subscale). They also reported significantly using higher levels of positive reinterpretation as a coping strategy when faced with stress (*COPE*: Positive Reinterpretation and Growth subscale). Patients consulting untrained GPs reported using significantly fewer denial coping strategies than patients consulting trained GPs (*COPE*: Denial subscale).

## **5.5 Discussion Study 3: Impact of GP consultations and GP training upon illness perceptions, psychopathology and coping styles of patients with health-related anxiety**

### **5.5.1 Impact of GP consultations in general**

It is perhaps not surprising that patients feel better after being given feedback by their doctor that their worrying physical symptoms are no cause for alarm. This was the case in Study 3. When this group of patients experiencing health-related anxiety were given feedback by their GP that their medical test results did not indicate any evidence of medical pathology, this study found that their general levels of anxiety, depression and somatisation dropped significantly, as did specific distress about their symptoms. They also reported an improved understanding of the symptoms; an increase in the use of adaptive coping strategies in the face of stress; and a decrease in focusing upon and ventilating about worried feelings.

It appears that this observed reduction in distress would support at least part of the negative reinforcement paradigm posited by Salkovskis (e.g., 1989; 1996; Salkovskis & Bass, 1997; Salkovskis & Warwick, 1986), and others (e.g., Clark, et al., 1997; Nezu et al., 2001; Sharpe et al., 1992; Warwick, 1989) as a partial explanation for the persistence of reassurance seeking noted in somatising patients. That is, reassurance provided by the GP offsets the aversive state of anxiety caused by physical symptoms; this offset of emotional distress is reinforcing. This study did not investigate whether this reinforcement led to further reassurance seeking and the ultimate maintenance of anxiety as is predicted by this learning paradigm, however this would be interesting given that this group of patients had a presentation in common with a health-related anxiety/ somatising patient sample (significantly higher levels of psychological distress, neuroticism and health concern, and

significantly lower levels of extraversion and fewer constructive coping strategies than would be expected from a non-clinical population).

### **5.5.2 Specific impact of GP training**

To break the reassurance-seeking cycle noted above, cognitive behaviour therapy aims to empower patients to reduce their symptoms themselves, by providing information and skills, rather than just feedback about negative test results. This information includes a meaningful alternative hypothesis to disease for the aetiology of the symptoms, and the skills include strategies to reduce their intensity and escalation (e.g., controlled breathing techniques, thought challenging, distraction tasks). If the efficacy upon patients of a training program for GPs were to be measured, it would seem important to investigate whether patients' coping behaviours and underlying cognitions about their symptoms changed in an additive way after they had consulted their (trained) GP. According to CBT theory and Leventhal's illness behaviour theory, underlying cognitions will ultimately affect ongoing behaviours and emotions; and behavioural (coping) responses will in turn impact cognition and emotions. Accordingly, although broad symptom measures were included, the main aim of this part of the study was to determine whether trained GPs could further impact upon patient's coping styles and alter negative illness cognitions about apparently harmless symptoms. A randomised controlled design was employed to ensure that any results obtained could be reasonably assumed to be a result of the training program.

The study found that patients who consulted trained doctors did display some different thoughts and coping behaviours than those who consulted trained GPs. Specifically, a week after patients in the experimental group consulted a trained GP they felt significantly more in control of their symptoms than they had prior to attending, indicating that the

impact of the GP training program significantly increased patient perceptions that they could personally positively impact the course of their 'illness' (*IPQ-R* Personal Control subscale). These changes were not observed in patients in the Pre-Training Control group; that is, on average, patients whose doctors had not been trained continued to experience the same belief in their level of control over their symptoms after they had been given the negative test results as before.

When Pre-Training Control Group GPs were trained, a similar positive impact upon illness perceptions was found for a new group of patients. The Post-Training Control Group results revealed that these patients also felt significantly more in control of their symptoms than they had prior to attending (*IPQ-R* Personal Control subscale).

It is possible that this sense of being able to control or reduce the symptoms will positively influence the patient's emotions and behaviour in the future. For instance, if they are able to successfully reduce their symptoms themselves, patients may not need to repetitively seek reassurance from their doctor. The literature would indicate that scores on the Personal Control subscale of the *IPQ-R* can predict emotional, behavioural and medical presentations in patients, including patients' coping, entry into, and use of medical treatment (Scharloo & Kaptein, 1997), and medical (e.g., pain severity), psychological (e.g., depression, anxiety, self-esteem, life satisfaction) and behavioural (e.g., working time, impairment, activity levels) outcomes (Heijmans, 1998; Scharloo & Kaptein, 1997). Additionally, a favourable course of chronic somatic illness has been found to be associated with high scores on the Personal Control subscale (see Scharloo & Kaptein, 1997), and Jensen, et al., (1994a) found that increased belief in personal control was associated with a decrease in number of pain-related physician visits.

The result of the current study linking enhanced feelings of personal control with CBT training is also consistent with other previous research. Hellman et al., (1990) found that

cognitive restructuring to increase a sense of internal control resulted in less physical discomfort and fewer GP visits for patients with psychosomatic complaints.

A sense of personal control over symptoms has also been associated with positive coping strategies including less avoidance and disengagement style coping, and more problem-focused coping (Heijmans, 1998; Moss-Morris, 1997).

Some positive changes in patients' coping behaviours emerged as a result of GP training in this study. Patients who consulted trained GPs reported an increased use of 'Positive Reinterpretation and Growth' coping strategies. Examples of items on this scale include, *"I try to see it in a different light, to make it seem more positive"*; *"I learn something from the experience"*. Lazarus & Folkman (1984) regarded this tendency (which they termed positive reappraisal) as a type of emotion-focused coping: aimed at managing distressing emotions. They stated, "Clearly however, the value of this tendency is not limited to the reduction of distress. That is, construing a stressful transaction in positive terms should intrinsically lead the person to continue (or to resume) active, problem-focused coping actions" (p.269-70).

Interestingly, patients attending untrained GPs reported a significantly decreased use of 'Denial' strategies compared to those consulting trained GPs. Examples of items in this subscale include, *"I say to myself this isn't real"*; *"I pretend that it hasn't really happened"*. Carver et al (1989) state that this subscale measures the tendency to refuse to believe that a stressor exists, or an attempt to try to act as though the stressor is not real. The Denial concept is sometimes considered functional, and at other times maladaptive. It is often suggested that denial may be useful, as it minimises distress and may thereby facilitate coping (e.g, Breznitz, 1983; Cohen & Lazarus, 1973). Alternatively, it has been argued that denial only creates additional problems unless the stressor can be successfully ignored. That is, denying the reality of the event allows the event to become more serious, thereby making

more difficult the coping that eventually must occur (e.g., Matthews, Siegel, Kuller, Thompson & Varat, 1983). A third view is that denial is useful at early stages of a stressful transaction, but impedes coping later on (Levine, Warrenburg, Kerns, Schwartz, Delaney, Fontana, Gradman, Smith, Allen & Cascione, 1987; Mullen & Suls, 1982; Suls & Fletcher, 1985). In this study, it is possible that a reduced use of Denial, as seen in patients consulting untrained GPs, indicates maladaptive coping, as patients seem to become more accepting of the seriousness of a stressor in their lives, when in fact, they should be reassured that their medical tests were clear of pathology.

The brief follow-up period and small numbers at follow-up are significant limitations of this study, and limit the inferences regarding efficacy that can be drawn. As expected, given the brevity of the intervention, there were no additive changes in depression, anxiety or somatisation scores as measured by the *BSI* as a result of training. It was not anticipated that one session with the trained GP and one week's worth of practice following the session would significantly alter any major somatisation, depression or anxiety symptoms given that many previous studies have indicated that several treatment sessions are required to effect such changes. For example, Sumathipala et al., (2000) found that at least three sessions were required to show clinical improvement in their group of patients with medically unexplained symptoms who received CBT treatment, although they offered six. Mynors-Wallis also offered six sessions, but considered four to be a minimum for an adequate course of treatment. Speckens et al. (1995) offered a variable number of sessions ranging between 6 and 16. Thus, while one of the major aims for this study was to observe changes in coping behaviours and cognitions that are hypothesised to underlie abnormal illness behaviour, it would be useful for future research to determine whether continued treatment, by GPs trained in CBT, does significantly reduce major psychological symptoms. It is conceivable, given other findings

in the literature, that the increase in sense of control over symptoms; use of positive reappraisal coping strategies; and the use of basic CBT strategies taught by their GP, may positively impact ongoing emotions and behaviours of these patients. It would be also important for this future research to note whether patients consulting untrained GPs relapsed in terms levels of psychological distress, as would be predicted from models of health related anxiety if changes were not made in terms of addressing underlying health concerns and self-management of symptoms. This study would also have been improved if comparison groups of patients presenting with medically explained symptoms, and/ or with a chronic illness had also been included.

## **6 Brief summary of findings from the three studies**

Study 1 examined the psychological profile of a group of patients experiencing health-related anxiety presenting to doctors in general medical practice. Studies 2 and 3 evaluated the effects of a brief cognitive behavioural training program for GPs, the latter study measured the program's impact upon the patients in Study 1, while Study 2 measured the program's impact upon GPs' knowledge and confidence to use the techniques imparted.

Study 1 investigated personality traits, coping styles, illness perceptions, and psychological symptoms in a group of sixty-six patients experiencing health-related anxiety presenting to Australian GPs. The results found that, compared to non-clinical populations, these patients had higher levels of neuroticism and lower levels of extraversion; they used significantly fewer problem-focused coping strategies; their perception of their symptoms was less adaptive; and they had higher levels of anxiety, depression and somatisation. Several psychological variables were found to predict levels of emotional distress in these patients. A combination of personality (Neuroticism) and illness perception variables (beliefs about the consequences of the symptoms, and the sense of coherence or understanding that patients had about the symptoms) best predicted depression levels. Dysfunctional coping, illness-perception and personality (Avoidance-Disengagement coping, thoughts about the severity of consequences, and Neuroticism in that order) predicted anxiety levels. There was just one significant predictor of Somatisation levels: an Avoidance-Disengagement coping style.

Study 2 measured whether a brief training program for GPs in basic cognitive behaviour therapy techniques could increase GP knowledge and confidence in using these skills. Results indicated that training did significantly increase pre-training knowledge and confidence in the cognitive behavioural skills imparted; however although confidence



levels in using the skills were maintained for six-months post-training, there was a significant reduction in GP knowledge relating to these skills six-months after completion of the program.

Study 3 employed a randomised control design to investigate the impact of the CBT training program upon patients of the GPs assessed in Study 1. Trained GPs recounted a cognitive-behavioural explanation for symptoms consistent with health-related anxiety, and taught at least one strategy for managing the symptoms (Experimental Group). Untrained GPs gave feedback to their patients in line with their typical approach in such cases (Pre-Training Control Group). Following GP intervention, all patients re-completed measures of coping styles, illness perceptions, and psychological symptoms. This study found that, regardless of training status, GP consultation and GP reassurance about test results produced significant improvements in a large number of measures of psychological functioning; including reduced anxiety, depression and somatisation levels; reduced distress about symptoms; increased understanding of symptoms; increased use of adaptive coping strategies; and a decrease in focusing upon and ventilating about worry.

When these patients consulted GPs who had been trained to provide feedback and instruction from a cognitive-behavioural perspective, there was an additional, positive effect on 'personal control', in that patients felt significantly more able to control the symptoms, course and severity of their problems than patients consulting untrained GPs. Training also increased the use of positive reinterpretation and denial as coping strategies. These findings are discussed within the perspective of cognitive conceptualisations of health-related anxiety, and several implications for GP training and GP management of such clients are articulated.

## 7 Limitations and future directions

Limitations with each of the three studies presented have been included in Sections 3-5 where the studies are presented. General limitations with the studies collectively are presented below.

All outcome measures for patient data in this study were self-reported, which raises the issue of information bias. It would have been more methodologically rigorous to have clinically interviewed patients individually, and/or used more objective measures of outcome (e.g., health-care utilisation figures). However, randomised controlled trials evaluating patient outcome following GP training programs are already very expensive and methodologically difficult (Gask, 1998), and these improvements would have been beyond the means of the current research.

Patient group sample sizes in this study were relatively small, which limited the power for analyses in some cases. It has been previously noted that sample sizes are typically small in research that assesses the efficacy of training programs (García-Campayo et al, 2002; Gask et al, 1989). It is acknowledged that the intervention period with GPs in this study was brief. Demands upon the time of Australian GPs are typically great, and it is difficult to enlist their participation in long-term training/ research involving multiple time points. In addition, the time constraints imposed upon a single researcher for the purposes of unfunded thesis research places some practical limitations upon the size of this study.

Study 2 presented the results of CBT training upon GP knowledge and confidence levels. A subset of GPs in this Study also participated in Study 3, a randomised control study investigating the impact of this training upon patients. Knowledge and confidence levels of this subset of GPs (who participated in Study 3) were not significantly different to the overall group in Study 2.

Despite some positive changes in illness cognitions and coping strategies observed as a result of the training program, it could be argued that there was an otherwise limited observable effect upon patient outcomes. It is acknowledged that, given the results of these studies, it is not possible to know whether long-term patient outcomes (e.g., depression and anxiety levels) will actually improve as a result of this training program for GPs. An examination of long-term effects was beyond the scope of this study, and there is certainly need for further research addressing this issue. There is evidence, however, that addressing somatising cognitions and behaviours can ultimately reduce somatic symptoms, even when there is no corresponding reduction in emotional distress. For example, Kroenke & Swindle (2001) completed a meta-analysis of 31 controlled trials of CBT targeting somatisation or somatising symptoms. They found that physical symptoms were the most responsive to treatment, with CBT-treated patients improving more than control subjects in 71% of the studies, and showing a trend towards improvement in a further 11% of the studies. They found however, that there was not always a corresponding reduction in psychological distress, with only 38% of the studies showing definite reduction in the treated group, and 8% showing a trend towards this. They concluded that benefits in the form of reduced symptoms can occur regardless of a reduction in emotional distress. Kroenke & Swindle (2001) argue that the beneficial effect of CBT on anxiety-related physical symptoms seems to occur independently of reductions in psychological distress; they state that:

*“responsiveness of somatic complaints may be related to a decrease in symptom-specific distressing cognitions or dysfunctional behaviors. Improved coping, diminished illness worry and catastrophizing, less avoidant behavior and greater perceived control may all be factors that reduce preoccupation with and amplification of somatic symptoms” (p. 213).*

It needs to be established whether GP training programs can replicate some of these effects.

Future research should also investigate whether patients' emotional outcomes are impacted over the long-term by their GPs being trained in these basic cognitive behavioural skills, perhaps as a result of these changes in cognitions and coping styles. In addition, future research should investigate whether this training program alters GP behaviour over a more extended period of time, and whether extended CBT training for GPs, including supervision in using the skills, further improves the outcomes measured in this project.

The current author considers that peer and expert supervision is the ideal adjunct to this training, and was involved with a pilot program investigating the feasibility of such supervision. In 2001, in association with the Victorian Royal Australian College of General Practitioners (RACGP) and the Australian Centre for Posttraumatic Mental Health (ACPMH: a federally-funded joint initiative between the University of Melbourne and the Commonwealth department of Veterans Affairs), a six-month supervision trial was conducted with six GPs who had participated in this training program. Unsurprisingly perhaps, the results demonstrated that GPs who had attended the monthly supervision sessions had significantly higher levels of knowledge and confidence six months after completion of the training than those who had attended the training alone. This would indicate that once monthly supervision and practise of the principles taught during the program further enhances learning and confidence in utilising the skills. Because of the small numbers involved in this trial data were not formally analysed.

It is concluded that a brief training program for GPs in basic cognitive behavioural skills and principles is effective in increasing GP knowledge and confidence for CBT, at least in the short-term, and in positively impacting some important coping skills and patient cognitions about ostensibly harmless somatic symptoms.

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**Appendix A: Copies of the patient psychological  
questionnaires (BSI, NEO-FFI, IPQ-R, COPE Scale)**

# NEO

## Five-Factor Inventory

### Form S

Paul T. Costa, Jr., Ph.D., and Robert R. McCrae, Ph.D.

#### Instructions

Write only where indicated in this booklet. Carefully read all of the instructions before beginning. This questionnaire contains 60 statements. Read each statement carefully. For each statement fill in the circle with the response that best represents your opinion. Make sure that your answer is in the correct box.

Fill in (SD) if you *strongly disagree* or the statement is definitely false.

Fill in (D) if you *disagree* or the statement is mostly false.

Fill in (N) if you are *neutral* on the statement, you cannot decide, or the statement is about equally true and false.

Fill in (A) if you *agree* or the statement is mostly true.

Fill in (SA) if you *strongly agree* or the statement is definitely true.

For example, if you *strongly disagree* or believe that a statement is definitely false, you would fill in the (SD) for that statement.

#### Example



Fill in only one response for each statement. Respond to all of the statements, making sure that you fill in the correct response. DO NOT ERASE! If you need to change an answer, make an "X" through the incorrect response and then fill in the correct response.

Note that the responses are numbered in *rows*. Before responding to the statements, turn to the inside of the booklet and enter your name, age, and sex and the date.

**PAR** Psychological Assessment Resources, Inc./P.O. Box 998/Odessa, FL 33556/Toll-Free 1-800-331-TEST

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1. I am not a worrier.
2. I like to have a lot of people around me.
3. I don't like to waste my time daydreaming.
4. I try to be courteous to everyone I meet.
5. I keep my belongings neat and clean.
6. I often feel inferior to others.
7. I laugh easily.
8. Once I find the right way to do something, I stick to it.
9. I often get into arguments with my family and co-workers.
10. I'm pretty good about pacing myself so as to get things done on time.
11. When I'm under a great deal of stress, sometimes I feel like I'm going to pieces.
12. I don't consider myself especially "light-hearted."
13. I am intrigued by the patterns I find in art and nature.
14. Some people think I'm selfish and egotistical.
15. I am not a very methodical person.
16. I rarely feel lonely or blue.
17. I really enjoy talking to people.
18. I believe letting students hear controversial speakers can only confuse and mislead them.
19. I would rather cooperate with others than compete with them.
20. I try to perform all the tasks assigned to me conscientiously.
21. I often feel tense and jittery.
22. I like to be where the action is.
23. Poetry has little or no effect on me.
24. I tend to be cynical and skeptical of others' intentions.
25. I have a clear set of goals and work toward them in an orderly fashion.
26. Sometimes I feel completely worthless.
27. I usually prefer to do things alone.
28. I often try new and foreign foods.
29. I believe that most people will take advantage of you if you let them.
30. I waste a lot of time before settling down to work.
31. I rarely feel fearful or anxious.
32. I often feel as if I'm bursting with energy.
33. I seldom notice the moods or feelings that different environments produce.
34. Most people I know like me.
35. I work hard to accomplish my goals.
36. I often get angry at the way people treat me.
37. I am a cheerful, high-spirited person.
38. I believe we should look to our religious authorities for decisions on moral issues.
39. Some people think of me as cold and calculating.
40. When I make a commitment, I can always be counted on to follow through.

41. Too often, when things go wrong, I get discouraged and feel like giving up.
42. I am not a cheerful optimist.
43. Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.
44. I'm hard-headed and tough-minded in my attitudes.
45. Sometimes I'm not as dependable or reliable as I should be.
46. I am seldom sad or depressed.
47. My life is fast-paced.
48. I have little interest in speculating on the nature of the universe or the human condition.
49. I generally try to be thoughtful and considerate.
50. I am a productive person who always gets the job done.
51. I often feel helpless and want someone else to solve my problems.
52. I am a very active person.
53. I have a lot of intellectual curiosity.
54. If I don't like people, I let them know it.
55. I never seem to be able to get organized.
56. At times I have been so ashamed I just wanted to hide.
57. I would rather go my own way than be a leader of others.
58. I often enjoy playing with theories or abstract ideas.
59. If necessary, I am willing to manipulate people to get what I want.
60. I strive for excellence in everything I do.

**Enter your responses here—remember to enter responses across the rows.**

SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree

1 (SD) (D) (N) (A) (SA)	2 (SD) (D) (N) (A) (SA)	3 (SD) (D) (N) (A) (SA)	4 (SD) (D) (N) (A) (SA)	5 (SD) (D) (N) (A) (SA)
6 (SD) (D) (N) (A) (SA)	7 (SD) (D) (N) (A) (SA)	8 (SD) (D) (N) (A) (SA)	9 (SD) (D) (N) (A) (SA)	10 (SD) (D) (N) (A) (SA)
11 (SD) (D) (N) (A) (SA)	12 (SD) (D) (N) (A) (SA)	13 (SD) (D) (N) (A) (SA)	14 (SD) (D) (N) (A) (SA)	15 (SD) (D) (N) (A) (SA)
16 (SD) (D) (N) (A) (SA)	17 (SD) (D) (N) (A) (SA)	18 (SD) (D) (N) (A) (SA)	19 (SD) (D) (N) (A) (SA)	20 (SD) (D) (N) (A) (SA)
21 (SD) (D) (N) (A) (SA)	22 (SD) (D) (N) (A) (SA)	23 (SD) (D) (N) (A) (SA)	24 (SD) (D) (N) (A) (SA)	25 (SD) (D) (N) (A) (SA)
26 (SD) (D) (N) (A) (SA)	27 (SD) (D) (N) (A) (SA)	28 (SD) (D) (N) (A) (SA)	29 (SD) (D) (N) (A) (SA)	30 (SD) (D) (N) (A) (SA)
31 (SD) (D) (N) (A) (SA)	32 (SD) (D) (N) (A) (SA)	33 (SD) (D) (N) (A) (SA)	34 (SD) (D) (N) (A) (SA)	35 (SD) (D) (N) (A) (SA)
36 (SD) (D) (N) (A) (SA)	37 (SD) (D) (N) (A) (SA)	38 (SD) (D) (N) (A) (SA)	39 (SD) (D) (N) (A) (SA)	40 (SD) (D) (N) (A) (SA)
41 (SD) (D) (N) (A) (SA)	42 (SD) (D) (N) (A) (SA)	43 (SD) (D) (N) (A) (SA)	44 (SD) (D) (N) (A) (SA)	45 (SD) (D) (N) (A) (SA)
46 (SD) (D) (N) (A) (SA)	47 (SD) (D) (N) (A) (SA)	48 (SD) (D) (N) (A) (SA)	49 (SD) (D) (N) (A) (SA)	50 (SD) (D) (N) (A) (SA)
51 (SD) (D) (N) (A) (SA)	52 (SD) (D) (N) (A) (SA)	53 (SD) (D) (N) (A) (SA)	54 (SD) (D) (N) (A) (SA)	55 (SD) (D) (N) (A) (SA)
56 (SD) (D) (N) (A) (SA)	57 (SD) (D) (N) (A) (SA)	58 (SD) (D) (N) (A) (SA)	59 (SD) (D) (N) (A) (SA)	60 (SD) (D) (N) (A) (SA)

Have you responded to all of the statements? \_\_\_\_\_ Yes \_\_\_\_\_ No

Have you entered your responses in the correct boxes? \_\_\_\_\_ Yes \_\_\_\_\_ No

Have you responded accurately and honestly? \_\_\_\_\_ Yes \_\_\_\_\_ No



# BSI<sup>®</sup> 18

## Brief Symptom Inventory 18

Leonard R. Derogatis, PhD

Name \_\_\_\_\_

ID Number \_\_\_\_\_ Date Tested \_\_\_\_\_

Gender \_\_\_\_\_ Age \_\_\_\_\_

Scored By \_\_\_\_\_

### INSTRUCTIONS:

Below is a list of problems people sometimes have. Read each one carefully and fill in the circle that best describe MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE PAST 7 DAYS INCLUDING TODAY. the circle for only one number for each problem. Do not skip any items. If you change your mind, erase your first mark and then fill in your new choice. Read the example before beginning. If you have any questions, please ask them now.

	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY	
						<b>EXAMPLE</b>
						<b>HOW MUCH WERE YOU DISTRESSED BY:</b>
1	0	1	2	● 3	4	Bodyaches

	NOT AT ALL	A LITTLE BIT	MODERATELY	QUITE A BIT	EXTREMELY		
						<b>HOW MUCH WERE YOU DISTRESSED BY:</b>	1
1	0	1	2	3	4	Faintness or dizziness	1
2	0	1	2	3	4	Feeling no interest in things	
3	0	1	2	3	4	Nervousness or shakiness inside	
4	0	1	2	3	4	Pains in heart or chest	1
5	0	1	2	3	4	Feeling lonely	
6	0	1	2	3	4	Feeling tense or keyed up	
7	0	1	2	3	4	Nausea or upset stomach	1
8	0	1	2	3	4	Feeling blue	
9	0	1	2	3	4	Suddenly scared for no reason	
10	0	1	2	3	4	Trouble getting your breath	1
11	0	1	2	3	4	Feelings of worthlessness	
12	0	1	2	3	4	Spells of terror or panic	
13	0	1	2	3	4	Numbness or tingling in parts of your body	1
14	0	1	2	3	4	Feeling hopeless about the future	
15	0	1	2	3	4	Feeling so restless you couldn't sit still	
16	0	1	2	3	4	Feeling weak in parts of your body	1
17	0	1	2	3	4	Thoughts of ending your life	
18	0	1	2	3	4	Feeling fearful	1

## COPE SCALE

We are interested in how people respond when they confront difficult or stressful events in their lives.

There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feel when you experience stressful events. Obviously, different events bring out somewhat different responses, but **think about what you usually do when you are under a lot of stress.**

Then respond to each of the following items by circling one number on your answer sheet for each, using the response choices listed just below.

Please try to respond to each item separately in your mind from each other item. Choose your answers thoughtfully, and make your answers as true FOR YOU as you can.

Please answer every item.

There are no "right" or "wrong" answers, so choose the most accurate answer for YOU – not what you think "most people" would say or do.

Indicate what YOU usually do when YOU experience a stressful event.

These are the choices for each question:

- 1 = I usually don't do this at all
- 2 = I usually do this a little bit
- 3 = I usually do this a medium amount
- 4 = I usually do this a lot

### EXAMPLE:

*When I'm under a lot of stress:*

<i>I admit to myself that I can't deal with it, and quit trying.</i>	1	2	3	4
--	---	---	---	---

This means that you would have this coping response a little bit when you are under stress.

## When I'm under a lot of stress, usually...

- 1 = I usually don't do this at all  
 2 = I usually do this a little bit  
 3 = I usually do this a medium amount  
 4 = I usually do this a lot

### RATING

1. I try to grow as a person as a result of the experience.	1	2	3	4
2. I turn to work or other substitute activities to take my mind off things.	1	2	3	4
3. I get upset and let my emotions out.	1	2	3	4
4. I try to get advice from someone about what to do.	1	2	3	4
5. I concentrate my efforts on doing something about it.	1	2	3	4
6. I say to myself "this isn't real."	1	2	3	4
7. I put my trust in God.	1	2	3	4
8. I laugh about the situation.	1	2	3	4
9. I admit to myself that I can't deal with it, and quit trying.	1	2	3	4
10. I restrain myself from doing anything too quickly.	1	2	3	4
11. I discuss my feelings with someone.	1	2	3	4
12. I use alcohol or drugs to make myself feel better.	1	2	3	4
13. I get used to the idea that it happened.	1	2	3	4
14. I talk to someone to find out more about the situation.	1	2	3	4
15. I keep myself from getting distracted by other thoughts or activities.	1	2	3	4
16. I daydream about things other than this.	1	2	3	4
17. I get upset, and am really aware of it.	1	2	3	4
18. I seek God's help.	1	2	3	4
19. I make a plan of action.	1	2	3	4
20. I make jokes about it.	1	2	3	4
21. I accept that this has happened and that it can't be changed.	1	2	3	4
22. I hold off doing anything about it until the situation permits.	1	2	3	4
23. I try to get emotional support from friends or relatives.	1	2	3	4
24. I just give up trying to reach my goal.	1	2	3	4
25. I take additional action to try to get rid of the problem.	1	2	3	4
26. I try to lose myself for a while by drinking alcohol or taking drugs.	1	2	3	4
27. I refuse to believe that it has happened.	1	2	3	4
28. I let my feelings out.	1	2	3	4
29. I try to see it in a different light, to make it seem more positive.	1	2	3	4



**When I'm under a lot of stress, usually...**

30. I talk to someone who could do something concrete about the problem.	1	2	3	4
31. I sleep more than usual.	1	2	3	4
32. I try to come up with a strategy about what to do.	1	2	3	4
33. I focus on dealing with this problem, and if necessary let other things slide a little.	1	2	3	4
34. I get sympathy and understanding from someone.	1	2	3	4
35. I drink alcohol or take drugs, in order to think about it less.	1	2	3	4
36. I kid around about it.	1	2	3	4
37. I give up the attempt to get what I want.	1	2	3	4
38. I look for something good in what is happening.	1	2	3	4
39. I think about how I might best handle the problem.	1	2	3	4
40. I pretend that it hasn't really happened.	1	2	3	4
41. I make sure not to make matters worse by acting too soon.	1	2	3	4
42. I try hard to prevent other things from interfering with my efforts at dealing with this.	1	2	3	4
43. I go to movies or watch TV, to think about it less.	1	2	3	4
44. I accept the reality of the fact that it happened.	1	2	3	4
45. I ask people who have had similar experiences what they did.	1	2	3	4
46. I feel a lot of emotional distress and I find myself expressing those feelings a lot.	1	2	3	4
47. I take direct action to get around the problem.	1	2	3	4
48. I try to find comfort in my religion.	1	2	3	4
49. I force myself to wait for the right time to do something.	1	2	3	4
50. I make fun of the situation.	1	2	3	4
51. I reduce the amount of effort I'm putting into solving the problem.	1	2	3	4
52. I talk to someone about how I feel.	1	2	3	4
53. I use alcohol or drugs to help me get through it.	1	2	3	4
54. I learn to live with it.	1	2	3	4
55. I put aside other activities in order to concentrate on this.	1	2	3	4
56. I think hard about what steps to take.	1	2	3	4
57. I act as though it hasn't even happened.	1	2	3	4
58. I do what has to be done, one step at a time.	1	2	3	4
59. I learn something from the experience.	1	2	3	4
60. I pray more than usual.	1	2	3	4

***Thank you for completing this form***

# ILLNESS PERCEPTION QUESTIONNAIRE (IPQ-R)

Name.....

Date.....

## YOUR VIEWS ABOUT YOUR ILLNESS

Listed below are a number of symptoms that you may or may not have experienced since your illness. Please indicate by circling *Yes* or *No*, whether you have experienced any of these symptoms since your illness, and whether you believe that these symptoms are related to your illness.

	I have experienced this symptom since my illness		This symptom is related to my illness	
	Yes	No	Yes	No
Pain				
Sore Throat				
Nausea				
Breathlessness				
Weight Loss				
Fatigue				
Stiff Joints				
Sore Eyes				
Wheeziness				
Headaches				
Upset Stomach				
Sleep Difficulties				
Dizziness				
Loss of Strength				

We are interested in your own personal views of how you now see your current illness.

Please indicate how much you agree or disagree with the following statements about your illness by ticking the appropriate box.

	VIEWS ABOUT YOUR ILLNESS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
IP1*	My illness will last a short time					
IP2	My illness is likely to be permanent rather than temporary					
IP3	My illness will last for a long time					
IP4*	This illness will pass quickly					
IP5	I expect to have this illness for the rest of my life					
IP6	My illness is a serious condition					

IP7	My illness has major consequences on my life					
IP8*	My illness does not have much effect on my life					
IP9	My illness strongly affects the way others see me					
IP10	My illness has serious financial consequences					
IP11	My illness causes difficulties for those who are close to me					
IP12	There is a lot which I can do to control my symptoms					
IP13	What I do can determine whether my illness gets better or worse					
IP14	The course of my illness depends on me					
IP15*	Nothing I do will affect my illness					
IP16	I have the power to influence my illness					
IP17*	My actions will have no affect on the outcome of my illness					
IP18*	My illness will improve in time					
IP19*	There is very little that can be done to improve my illness					
IP20	My treatment will be effective in curing my illness					
IP21	The negative effects of my illness can be prevented (avoided) by my treatment					
IP22	My treatment can control my illness					
IP23*	There is nothing which can help my condition					
IP24	The symptoms of my condition are puzzling to me					
IP25	My illness is a mystery to me					
IP26	I don't understand my illness					
IP27	My illness doesn't make any sense to me					
IP28*	I have a clear picture or understanding of my condition					
IP29	The symptoms of my illness change a great deal from day to day					
IP30	My symptoms come and go in cycles					
IP31	My illness is very unpredictable					
IP32	I go through cycles in which my illness gets better and worse.					
IP33	I get depressed when I think about my illness					
IP34	When I think about my illness I get upset					
IP35	My illness makes me feel angry					
IP36*	My illness does not worry me					
IP37	Having this illness makes me feel anxious					
IP38	My illness makes me feel afraid					

## **Appendix B: Further detail regarding COPE and IPQ-R**

### **subscales**

#### **IPQ-R Subscale Items**

##### **Timeline acute/chronic**

- My illness will last a short time (r)
- My illness is likely to be permanent rather than temporary
- My illness will last for a long time
- This illness will pass quickly (r)
- I expect to have this illness for the rest of my life
- My illness will improve in time (r)

##### **Timeline cyclical**

- The symptoms of my illness change a great deal from day to day
- My symptoms come and go in cycles
- My illness is very unpredictable
- I go through cycles in which my illness gets better and worse

##### **Consequences**

- My illness is a serious condition
- My illness has major consequences on my life
- My illness does not have much effect on my life (r)
- My illness strongly affects the way others see me
- My illness has serious financial consequences
- My illness causes difficulties for those who are close to me

##### **Personal control**

- There is a lot which I can do to control my symptoms
- What I do can determine whether my illness gets better or worse
- The course of my illness depends on me
- Nothing I do will affect my illness (r)
- I have the power to influence my illness
- My actions will have no effect on the outcome of my illness

### Treatment control

- There is very little that can be done to improve my illness
- My treatment will be effective in curing my illness
- The negative effects of my illness can be prevented (avoided) by my treatment
- My treatment can control my illness
- There is nothing which can help my condition (r)

### Emotional representations

- I get depressed when I think about my illness
- When I think about my illness I get upset
- My illness makes me feel angry
- My illness does not worry me (r)
- Having this illness makes me feel anxious
- My illness makes me feel afraid

### Illness Coherence

- The symptoms of my condition are puzzling to me (r)
- My illness is a mystery to me (r)
- I don't understand my illness (r)
- My illness doesn't make any sense to me (r)
- I have a clear picture or understanding of my condition

### Summary of the COPE Scale dimensions

*Active coping*: defined as the process of taking active steps to try to remove or circumvent the stressor, or to ameliorate its effects. It includes initiating and taking direct action, increasing one's efforts, and trying to execute a coping attempt in a stepwise fashion. The authors state that this is very like Lazarus & Folkman's (1984) problem-focused coping. They say that they add distinctions to this concept by including the following three additional scales.

*Planning*: is thinking about how to cope with a stressor. Planning involves coming up with action strategies, thinking about what steps to take and how best to handle the problem. This is clearly problem-focused, but it differs conceptually from taking a problem-focused

action. Planning also occurs during problem appraisal, whereas active coping occurs during the coping phase.

*Suppression of competing activities:* Another aspect in certain kinds of problem-focused coping is setting a constriction in the range of competing activities. This may mean suppressing the processing of competing channels of information, or putting other projects aside, or even letting other things slide in order to concentrate more fully on the challenge or threat at hand.

*Restraint coping:* is waiting until an appropriate opportunity to act presents itself, holding oneself back, and not acting prematurely. This is an active coping strategy in the sense that the person's behaviour is focused on dealing effectively with the stressor, but it is also a passive strategy in the sense that using restraint means not acting.

*Seeking social support for instrumental reasons:* is seeking advice assistance or information. This is problem-focused coping. People can also seek social support in the following way

*Seeking social support for emotional reasons:* is seeking sympathy, moral support or understanding. This is an aspect of emotion-focused coping. These two ways of seeking social support differ conceptually, but often co-occur in real life. Seeking social support can be functional or not: we can reassurance and return to problem-focused coping. On the other hand, sources of sympathy are sometimes used more as outlets for the ventilation of one's feelings. There is evidence that this is not always adaptive (e.g., Billings & Moos, 1984).

*Focusing on and venting of emotions:* The authors state that this is a possible maladaptive coping style. This scale refers to the tendency to focus on whatever distress or upset one is feeling and to ventilate those feelings. They state that this may be functional during a period of mourning to accommodate the loss of a loved one and move forward, but there

is reason to suspect that focusing on these emotions, particularly for long periods, can impede adjustment (see Felton, Revenson & Hinrichsen, 1984). The salience of the distress may exacerbate the distress (see Scheier & Carver, 1977); focusing on the distress may also distract some people from active coping efforts and movement beyond the distress.

These coping responses may be beneficial for some people in some situations but not for others or for other situations. "To put it differently, a given coping strategy may not be intrinsically maladaptive, but may become dysfunctional if it is relied upon for long periods when other strategies are more useful" (p.269).

*Behavioural disengagement:* Another potentially dysfunctional strategy according to the authors. It involves reducing one's effort to deal with the stressor, even giving up the attempt to attain goals with which the stressor is interfering. Behavioural disengagement is reflected in the phenomena identified as helplessness.

*Mental disengagement:* Is a variation on the above, postulated to occur when conditions prevent behavioural disengagement. It occurs in a wide variety of activities that serve to distract the person from thinking about the goal with which the stressor is interfering. It includes daydreaming, sleep, or watching TV. This is called a "multiple act criterion" because there are many things that can be done here.

All of the scales above are theoretically based. The scales where empirical evidence has shown that these responses may be important include:

*Positive reinterpretation and growth:* Lazarus & Folkman (1984) regarded this tendency (which they called positive reappraisal) as a type of emotion-focused coping: aimed at managing distress emotions rather than dealing with the stressor per se. "Clearly however, the value of this tendency is not limited to the reduction of distress. That is, construing a stressful

transaction in positive terms should intrinsically lead the person to continue (or to resume) active, problem-focused coping actions" (p.269-70).

*Denial:* Refusal to believe that the stressor exists or trying to act as though the stressor is not real. A response that sometimes emerges in the primary appraisal stage of threat. Denial is somewhat controversial. It is often suggested that denial is useful, minimizing distress and thereby facilitating coping (e.g. Breznitz, 1983; Cohen & Lazarus, 1973). Alternatively, it can be argued that denial only creates additional problems unless the stressor can be successfully ignored. That is, denying the reality of the event allows the event to become more serious, thereby making more difficult the coping that eventually must occur (e.g., Matthews, Siegel, Kuller, Thompson & Varat, 1983). A third view is that denial is useful at early stages of a stressful transaction, but impedes coping later on (Levine, Warrenburg, Kerns, Schwartz, Delaney, Fontana, Gradman, Smith, Allen & Cascione, 1987; Mullen & Suls, 1982; Suls & Fletcher, 1985). Carver, Pozo, Harris, Noriega, Scheier, Robinson, Ketcham, Moffat & Clark (1993) found that in women diagnosed with early stage breast cancer Denial was consistently related to higher levels of concurrent distress, and was a prospective predictor of high distress at 6-month follow-up. There was also such a tendency for behavioural disengagement.

*Acceptance:* The opposite of denial. It could be argued that this is a functional coping response, in that a person who accepts the reality of a stressful situation would seem to be a person who engages in the attempt to deal with the situation. Acceptance impinges on two aspects of the coping process. Acceptance of a stressor as real occurs in primary appraisal; acceptance of the current absence of active coping strategies relates to secondary appraisal. One might expect acceptance to be particularly important in circumstances in which the stressor is something that must be accommodated to, as opposed to circumstances in which the stressor can be easily changed. Carver, Pozo,



Harris, Noriega, Scheier, Robinson, Ketcham, Moffat & Clark (1993) found that in women diagnosed with early stage breast cancer Acceptance was consistently linked to low levels of concurrent distress and was a prospective predictor of low distress at 6-month follow-up. Positive reframing was also related to low concurrent distress.

*Turning to religion:* Data collected by McRae & Costa (1986) suggests that such a coping tactic may be quite important to many people. "In considering how to treat this as a coping strategy we faced something of a dilemma. One might turn to religion when under stress for widely varying reasons: religion might serve as a source of emotional support, as a vehicle for positive reinterpretation and growth, or as a tactic of active coping with a stressor. Thus in principle it would be possible to have multiple religion-related scales assessing each of these potential functions. We opted instead for a single scale that assessed, in a general way, the tendency to turn to religion in times of stress" (p. 270).

*Substance use:* Was included as a scale after it was found that it was a separate factor to mental disengagement, which it was originally conceived to be a part of.

## **Appendix C: Patient participant information sheets and consent forms**



# What is this all about?

**Hello, my name is Leah Giarratano.**

## What's all this about?

I'm a clinical psychologist doing some research and wonder whether you'd be prepared to spend about 15-20 minutes completing the questionnaires enclosed to help me with the study.

I'll never know who you are, and your answers can remain completely anonymous if you'd like them to. If you'd rather know what the results of your answers mean however, you can let me know by completing one of the following forms, and I'll send your results to your doctor who can pass them on to you. Because the envelope you received this information in is coded, I'll still never find out who you are because I can send your doctor the results without needing to know your name or any other details.

## What's in this kit?

- ☐ The first page is a more detailed explanation about my research.
- ☐ The second page is a consent form for you to complete (I only need your signature, and can't identify you from that)
- ☐ The third page is a feedback form – it asks you whether you want to know the results of your questionnaires. If you do, I'll send them to your doctor and he or she will know to give them to you from the code I'll send them
- ☐ Then there is a return addressed envelope to me (please put your consent form, the feedback form, and all of the questionnaires in there when you've finished them)
- ☐ Lastly there are the questionnaires. The instructions are at the top of the page on each one.

## If you have questions...

You can call (02) 9832 9471 or email me ([leahg@bigpond.net.au](mailto:leahg@bigpond.net.au))

## If you decide not to take part

That's fine. I'd really appreciate it if you'd return the unanswered questionnaires to me though, because they're pretty expensive.

Thanks for all of your help.

Regards, Leah.



# Research Project - Information Sheet

## Managing Health-Related Anxiety in General Practice

### **What is this research about?**

This research project aims to study anxiety levels and coping skills in people seeing their GP, and measure how these levels impact upon the way a person thinks about their health. Your GP has, or will be, undertaking some further study to help patients manage their anxiety and stress levels better, and this research project will also measure whether the training program helps them to do this. If you decide to participate in this study, you will be part of a research project for a Doctor of Psychology program undertaken at the University of Wollongong by Leah Giarratano – that's me.

### **What will you be doing if you participate in this study?**

This study has two stages – this is Stage 1 – and you might be asked by your doctor to be involved in Stage 2. Your involvement or not in this study is completely up to you. Your treatment by your doctor will not change whether or not you are involved in the study, and your doctor will not mind if you choose not to be involved. Your treatment remains the same either way.

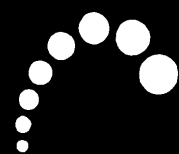
Stage 1 involves completing some questionnaires. They'll take around 15 – 20 minutes to complete. When you've finished them, you just put them into the envelope provided, seal it and send it to me in the envelope enclosed (postage is pre-paid). Your envelope will have a code on it so that I know who your doctor is, and your doctor will know that this code relates to your name, but I will never know your full identifying details (I'll only see your signature on the attached consent form). If you want to know the results of these questionnaires, or you would like your doctor to know them, I can give the feedback to your doctor, and he or she will know who it relates to. In other words, I'll never know who you are, and no-one will know that the results of these questionnaires relate to you unless you want to know, or you want your doctor to know.

Your GP may or may not ask you to be involved in the second stage of the project. If you are asked to be involved in Stage 2, this would happen when you go back to see your doctor. You are free to not be involved in Stage 2, even if you decide to be involved in Stage 1. You are free to withdraw from this study at any time, or not be involved at all, and this will not affect your treatment now or in the future, and will not affect how your doctor feels about you.

Stage 2 of the study would involve completing the same questionnaires as in Stage 1, but this time you'd be asked to fill them in a week after you see your doctor, and then send them to me from your house (they will include a return address envelope addressed to me). Your doctor might also ask you to practise some stress management exercises at home during that week. These exercises would not change or replace any of the usual treatment your doctor would give you. The data collected from this study will be used for a thesis, and possibly journal publication (although your name will not be published).

And that's it. If you choose to be involved in this study, please fill in the attached form. This is a consent form, explaining that you have read this information sheet, and agree to be involved. Remember that even if you have filled in the consent form, and you later change your mind about being part of the study, you can withdraw at any time. Please return your consent form in the envelope provided. If you want to know the results of your questionnaires, or you want your doctor to know, please fill in the YES box(es) on the form attached to the questionnaires. Thanks for taking the time to read and consider this study, and please feel free to keep this form.

If you would like to ask me any questions about this study, I can be reached on (02) 9832 9471, or email: [psycon@bigpond.net.au](mailto:psycon@bigpond.net.au), and my supervisor, Dr Craig Gonsalvez can be reached on (02) 4221 3674. If you have any concerns or complaints regarding the way in which this research is being, or has been conducted, you should contact the Secretary of the University of Wollongong Human Research Ethics Committee on (02) 4221 4457.



# Consent Form

**Project Title: Managing Health-Related Anxiety in General Practice**

**Researcher's Name: Leah Giarratano**

I have been given information about the research project titled *Managing Health-Related Anxiety in General Practice* that is being undertaken by Leah Giarratano, as part of her Doctor of Clinical Psychology degree supervised by Dr Craig Gonsalvez in the Department of Psychology at the University of Wollongong.

I understand that, if I consent to participate in this project I will be asked to complete some questionnaires for Stage One of the project, and, if I am asked to be involved in Stage Two of the project, to complete the same questionnaires one week after I see my doctor for my next appointment. I may also be asked to practise a stress management technique at home for a week.

I have been advised of the time burden associated with this research, which is around 15 – 20 minutes each time I complete the questionnaires, and up to 15 minutes a day for one week if I am asked to practise a stress management exercise. I have been offered the opportunity to ask Leah Giarratano any questions that I may have about the research and my participation.

I understand that my participation in this research is voluntary, and that I am free to refuse to participate and I am free to withdraw from the research at any time. My refusal to participate or withdrawal of consent will not affect my treatment in any way or my relationship with my GP or anyone in their practice.

If I have any enquiries about the research, I can contact Leah Giarratano on (02) 9832 9471, or her supervisor, Dr Craig Gonsalvez on (02) 4221 3674. If I have any concerns or complaints regarding the way the research is or has been conducted, I understand that I can contact the Complaints Officer, Human Research Ethics Committee, University of Wollongong on (02) 42214457.

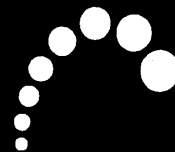
By signing below I am indicating my consent to participate in the research entitled *Managing Health-Related Anxiety in General Practice*, conducted by Leah Giarratano as it has been described to me in the information sheet. I understand that the data collected from my participation will be used for a thesis, and possibly journal publication (although my name will not be published), and I consent for it to be used in that manner.

Signed

Date

.....

...../...../.....



# Feedback Request Form

Project Title: Managing Health-Related Anxiety in General Practice

Researcher's Name: Leah Giarratano

Please make the results of these questionnaires available to my GP

☐

Please ask my GP to pass these results on to me

☐

Please DO NOT pass these results onto my GP (in this case they will stay completely anonymous, as the researcher cannot identify you from the code attached to these questionnaires)

☐

Thank you very much for your time and for  
participating in this research project



# What is this all about?

**Hi – Leah Giarratano here again.**

## What's this second stage about?

Your doctor has asked you to be involved in the second stage of my research project. This means that you've already completed some questionnaires for me before. Thanks again! This second set of questionnaires takes less time, because there are fewer of them, and you'll find that they are the same questions as two of the last questionnaires.

It doesn't matter at all if you've forgotten what you put last time. Just answer them how you feel right now.

## What's in this kit?

- ☐ The first page is a more detailed explanation about my research (you got this last time too, it's just a reminder in case you lost your other one).
- ☐ The third page is a feedback form – it asks you whether you want to know the results of your questionnaires. If you do, I'll send them to your doctor and he or she will know to give them to you from the code I'll send them.
- ☐ Then there is a return addressed envelope to me (please put your feedback form, and all of the questionnaires in there when you've finished them)
- ☐ Lastly there are the questionnaires. The instructions are at the top of the page on each one.

## If you have questions...

You can call (02) 9832 9471 or email me ([leahg@bigpond.net.au](mailto:leahg@bigpond.net.au))

## If you decide not to take part

That's fine. I'd really appreciate it if you'd return the unanswered questionnaires to me though, because they're pretty expensive.

Thanks for all of your help.

Regards, Leah.



# Research Project - Information Sheet

## Managing Health-Related Anxiety in General Practice

### What is this research about?

This research project aims to study anxiety levels and coping skills in people seeing their GP, and measure how these levels impact upon the way a person thinks about their health. Your GP has, or will be, undertaking some further study to help patients manage their anxiety and stress levels better, and this research project will also measure whether the training program helps them to do this. If you decide to participate in this study, you will be part of a research project for a Doctor of Psychology program undertaken at the University of Wollongong by Leah Giarratano – that's me.

### What will you be doing if you participate in this study?

This study has two stages – this is Stage 2. Your involvement or not in this study is completely up to you. Your treatment by your doctor will not change whether or not you are involved in the study, and your doctor will not mind if you choose not to be involved. Your treatment remains the same either way.

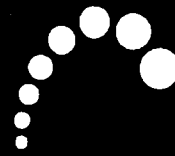
Stage 2 involves completing some questionnaires. They'll take around 15 – 20 minutes to complete. When you've finished them, you just put them into the envelope provided, seal it and send it to me in the envelope enclosed (postage is pre-paid). Your envelope will have a code on it so that I know who your doctor is, and your doctor will know that this code relates to your name, but I will never know your full identifying details (I'll only see your signature on the attached consent form). If you want to know the results of these questionnaires, or you would like your doctor to know them, I can give the feedback to your doctor, and he or she will know who it relates to. In other words, I'll never know who you are, and no-one will know that the results of these questionnaires relate to you unless you want to know, or you want your doctor to know.

Stage 2 involves completing most of the same questionnaires as in Stage 1, but this time you'll fill them in a week after you saw your doctor, and then send them to me from your house (they include a return address envelope addressed to me). Your doctor might also have asked you to practise some stress management exercises at home during that week (if he hasn't, don't worry, it's just part of the project, some people will do the exercises and some won't). These exercises would not change or replace any of the usual treatment your doctor would give you. The data collected from this study will be used for a thesis, and possibly journal publication (although your name will not be published).

And that's it. If you want to know the results of your questionnaires, or you want your doctor to know, please fill in the YES box(es) on the form attached to the questionnaires. Thanks for taking the time to read and consider this study, and please feel free to keep this form.

If you would like to ask me any questions about this study, I can be reached on (02) 9832 9471, or email: [psycon@bigpond.net.au](mailto:psycon@bigpond.net.au), and my supervisor, Dr Craig Gonsalvez can be reached on (02) 4221 3674. If you have any concerns or complaints regarding the way in which this research is being, or has been conducted, you should contact the Secretary of the University of Wollongong Human Research Ethics Committee on (02) 4221 4457.





# Feedback Request Form

**Project Title: Managing Health-Related Anxiety in General Practice**

**Researcher's Name: Leah Giarratano**

Please make the results of these questionnaires available to my GP

☐

Please ask my GP to pass these results on to me

☐

Please DO NOT pass these results onto my GP (in this case they will stay completely anonymous, as the researcher cannot identify you from the code attached to these questionnaires)

☐

Thank you very much for your time and for  
participating in this research project

## Appendix D: Study 1 comparison of means – further detail

### NEO results: Comparing means of the current study with the comparison group

In order to compare means, the standard error and upper and lower 95% confidence intervals around the mean had to be calculated, as standard errors were not presented in Costa & McRae's (1992) results. The following formula was used to calculate the standard error for the latter sample (see Welkowitz, Ewen & Cohen, 1976):

$$s_x = \frac{sd}{\sqrt{N}}$$

Results indicated that patients in the current study had significantly higher levels of Neuroticism than the non-clinical normative group; that is, there was no overlap in the 95% confidence intervals for the Neuroticism means in this study (Totals for all groups: 26.93 - 30.97) and the published normative Neuroticism means (18.59 - 19.55). This group also had significantly lower levels of Extroversion and Conscientiousness than the non-clinical normative group; that is, there was no overlap in the 95% confidence intervals for the Extroversion means in this study (Totals for all groups: 20.69 - 24.00) and the published normative Extroversion means (24.06 - 28.05), nor for Conscientiousness means: Current study Totals for all groups: 29.23 - 32.98; normative study: 34.21 - 34.93.

**Table 20. Mean results for current study and comparison group calculated with NEO-PI-R manual (FFI sample; Costa & McRae, 1992, p.78)**

	Current study		NEO-FFI Authors	
	Mean	SD	Mean	SD
<b>Neuroticism</b>	28.86	7.85	19.07	7.68
<b>Extroversion</b>	22.35	6.73	27.69	5.85
<b>Openness</b>	26.61	7.19	27.03	5.84
<b>Agreeableness</b>	30.77	7.43	32.84	4.97
<b>Conscientiousness</b>	31.11	7.61	34.57	5.88

### **COPE results: Comparing means of the current study with the comparison group**

In order to compare means, the standard error and upper and lower 95% confidence intervals around the mean had to be calculated, as standard errors were not presented in Ben-Zur's (1999) results. Results indicated that all groups of patients in the current study reported using significantly fewer Problem/ Accommodation than those in Ben-Zur's (1999) sample; that is, there was no overlap in the 95% confidence intervals for these factors. Although the current study's mean scores on the Support/Emotion factor were generally lower than for the comparison group, there was some overlap in means. Again, there was some overlap in means on the Avoidance/ Disengagement strategies factor between groups, although the current patients tended to use more of these strategies.

**Table 21. Means of Ben Zur (1999) COPE factors, presented with standard error and 95% confidence intervals**

<b>Factor</b>	<b>Mean (n=42)</b>	<b>SD</b>	<b>SE</b>	<b>95% CI lower</b>	<b>95%CI upper</b>
Problem/accommodation	12.01	1.51	0.23	11.55	12.47
Support/emotion	11.22	2.85	0.44	10.36	12.08
Avoidance/disengagement	6.88	1.67	0.26	6.37	7.39

**Table 22 Current study means, standard error and 95% confidence intervals for Ben Zur (1999) COPE factors**

<b>Factor</b>	<b>Mean (n=66)</b>	<b>SD</b>	<b>SE</b>	<b>95% CI lower</b>	<b>95%CI upper</b>
Problem/accommodation	9.71	2.13	0.26	9.18	10.23
Support/emotion	9.80	2.67	0.37	9.07	10.53
Avoidance/disengagement	7.57	18.6	0.23	7.11	8.02

### **IPQ-R results: Comparing means of the current study with the comparison groups**

In order to compare means, the standard error and upper and lower 95% confidence intervals around the mean had to be calculated, as standard errors were not presented in Moss-Morris et al's (2002) results. Results indicated that patients in the current study responded to the *IPQ-R* in a manner more closely resembling a chronic pain than an acute pain population, although there were some significant differences with each. Patients in this study had significantly lower means on the Timeline (acute/chronic) and the Consequences subscales than the Moss-Morris et al, (2002) chronic pain group. That is, there was no overlap in the 95% confidence intervals for the Timeline (acute/chronic) means in this study (Totals for all groups: 16.24 – 17.46) and the published chronic pain patient means (22.03 – 24.21); nor for the Consequences subscale means in this study (Totals for all groups: 17.19 – 19.30) and the published chronic pain patient means (22.49 – 24.41). The means for the other subscales measured by this questionnaire were comparable to the published chronic pain sample.

Patients in the current study responded significantly differently to all *IPQ-R* subscales when compared to the acute pain population. Their means on the Timeline (acute/chronic) and the Consequences subscales were significantly higher than for the Moss-Morris et al, (2002) acute pain group, indicating that they perceived their illness as likely to have more dire consequences for their life and to persist for a longer period of time. That is, there was no overlap in the 95% confidence intervals for the Timeline (acute/chronic) means in this study (Totals for all groups: 16.24 – 17.46) and the published acute pain patient means (11.62 – 15.18); nor for the Consequences subscale means in this study (Totals for all groups: 17.19 – 19.30) and the published acute pain patient means (12.76 – 15.79). Their scores on the Timeline (cyclical) and Emotional Representations subscale were also significantly higher than for the acute pain group,

indicating that they felt that their illness was more unpredictable and they felt more distressed about the symptoms. Their scores were significantly lower on the Personal Control and Treatment Control subscales, indicating that they felt there was less that they or their treatment could do to improve their symptoms than did the acute pain group.

**Table 23. Means of Moss-Morris *et al* (2002) chronic pain group, presented with standard error and 95% confidence intervals**

	Mean (n = 63)	SD	SE	95% CI lower	95%CI upper
Timeline (a/c)	23.12	4.41	0.14	22.85	23.39
Consequences	23.45	3.89	0.12	23.21	23.69
Personal control	18.42	4.01	0.13	18.17	18.67
Treatment control	14.22	3.36	0.11	14.01	14.43
Illness coherence	13.37	4.78	0.15	13.07	13.67
Timeline (cyclical)	12.87	3.89	0.12	12.63	13.11
Emotional Rep.	19.75	4.15	0.13	19.49	20.01

**Table 24. Means of Moss-Morris *et al* (2002) acute pain group, presented with standard error and 95% confidence intervals**

	Mean (n = 63)	SD	SE	95% CI lower	95%CI upper
Timeline (a/c)	13.4	5.38	0.17	13.07	13.73
Consequences	14.23	4.44	0.14	13.95	14.51
Personal control	22.94	3.52	0.11	22.72	23.16
Treatment control	19.43	3.28	0.10	19.23	19.63
Illness coherence	9.31	3	0.09	9.12	9.50
Timeline (cyclical)	9.37	2.58	0.08	9.21	9.53
Emotional Rep.	16.12	4.03	0.13	15.87	16.37

**Table 25. Current study means presented with standard error and 95% confidence intervals**

	<b>Mean (N= 66)</b>	<b>SD</b>	<b>SE</b>	<b>95% CI lower</b>	<b>95%CI upper</b>
Timeline (a/c)	16.85	2.47	0.30	16.24	17.46
Consequences	18.24	4.29	0.53	17.19	19.30
Personal control	17.77	2.72	0.34	17.10	18.44
Treatment control	15.17	2.55	0.31	14.54	15.79
Illness coherence	14.52	5.05	0.62	13.28	15.76
Timeline (cyclical)	13.21	3.27	0.40	12.41	14.02
Emotional Rep.	19.29	4.17	0.51	18.26	20.31

# **Appendix E: GP participant information sheet and consent form**

# **PSYCON** *Strategies for Success*

PTY LTD ABN 15 068 476 077

## **PSYCHOLOGICAL CONSULTANTS**

PO BOX 1142 PENRITH NSW 2751

Phone (02) 9625 4369 Fax (02) 9832 9471

Email: [psycon@bigpond.net.au](mailto:psycon@bigpond.net.au)

25 August 2001

Dear Dr

Thank you for agreeing to participate in this research project. You have been allocated to the Control Group of the project. We would like you to collect some baseline measures for us. This will involve very little of your time. We will call this part of your role in the project Step One. This step and the other two steps in which you will be involved are explained below:

### **Step One**

This is the part of the study you are involved in now. It involves asking three of your patients to fill in some questionnaires, and that's about it. This is the only stage of the project you need to act upon now. Page 2 of this letter will explain this process a little more clearly.

### **Step Two**

This is where you attend the training program on the weekend of 6 – 7 October. It's a great program and we encourage you to attend for both of the two days (some doctors choose to have a day off after 'working' the weekend completing the program). For attending this part of the program you'll receive 45 CME points.

### **Step Three**

During this part of the program you will practise with three patients one or two of the new skills you have learned in the above program. You'll then ask these patients to complete some questionnaires. For participating in this part of the program you'll receive 20 Clinical Audit points.

We'll be in touch soon regarding your training program in October. This information relates to the research project. Upon completion, you'll receive 20 Clinical Audit points for your participation.

The remainder of this letter will explain Step One to you. We'd like you to start on this part of the project as soon as you can. We will be sending you a pre-program reading manual around 3 weeks before your program in October, and we'd like there to be no interference from the reading of your manual with the way that you normally consult with your patients.



# Step One – This is what you do now

## What's in this kit?

You'll find in this kit the following:

- ☐ This two page letter
- ☐ 1 Process Chart – clearly marked
- ☐ 7 envelopes (3 marked with a blue line and 3 marked with a red line, and one addressed to Psycon)
- ☐ 1 Feedback Form – clearly marked

## What's the research study about?

The aim of our training program is to assist you to manage patients with health-related anxiety. The aim of the project is to investigate whether the training program affects the way that these patients think about or perceive their physical symptoms. In the envelopes are questionnaires that measure the way that they perceive the symptoms, their general coping styles, certain aspects of their personality, and some psychological symptoms (like anxiety level and depression level). These questionnaires could take your patients around 30 minutes or so to complete. They can fill them in at home.

## Which patients do I give the envelopes to?

The patients that we would like to include in this study are those who present complaining of symptoms that could be consistent with anxiety or tension. Such symptoms could include:

- |                                       |  |   |  |
|---------------------------------------|--|---|--|
| <input type="checkbox"/> Heart racing | <input type="checkbox"/> Stomach cramps    | <input type="checkbox"/> Feeling faint          | <input type="checkbox"/> Diarrhoea           |
| <input type="checkbox"/> Sweating     | <input type="checkbox"/> Chest pain        | <input type="checkbox"/> Headaches              | <input type="checkbox"/> Breathlessness      |
| <input type="checkbox"/> Nausea       | <input type="checkbox"/> Dizziness         | <input type="checkbox"/> Tingling sensations    | <input type="checkbox"/> Feelings of choking |
| <input type="checkbox"/> Numbness     | <input type="checkbox"/> Shaking/ unsteady | <input type="checkbox"/> Fear of losing control | <input type="checkbox"/> Heart pounding      |

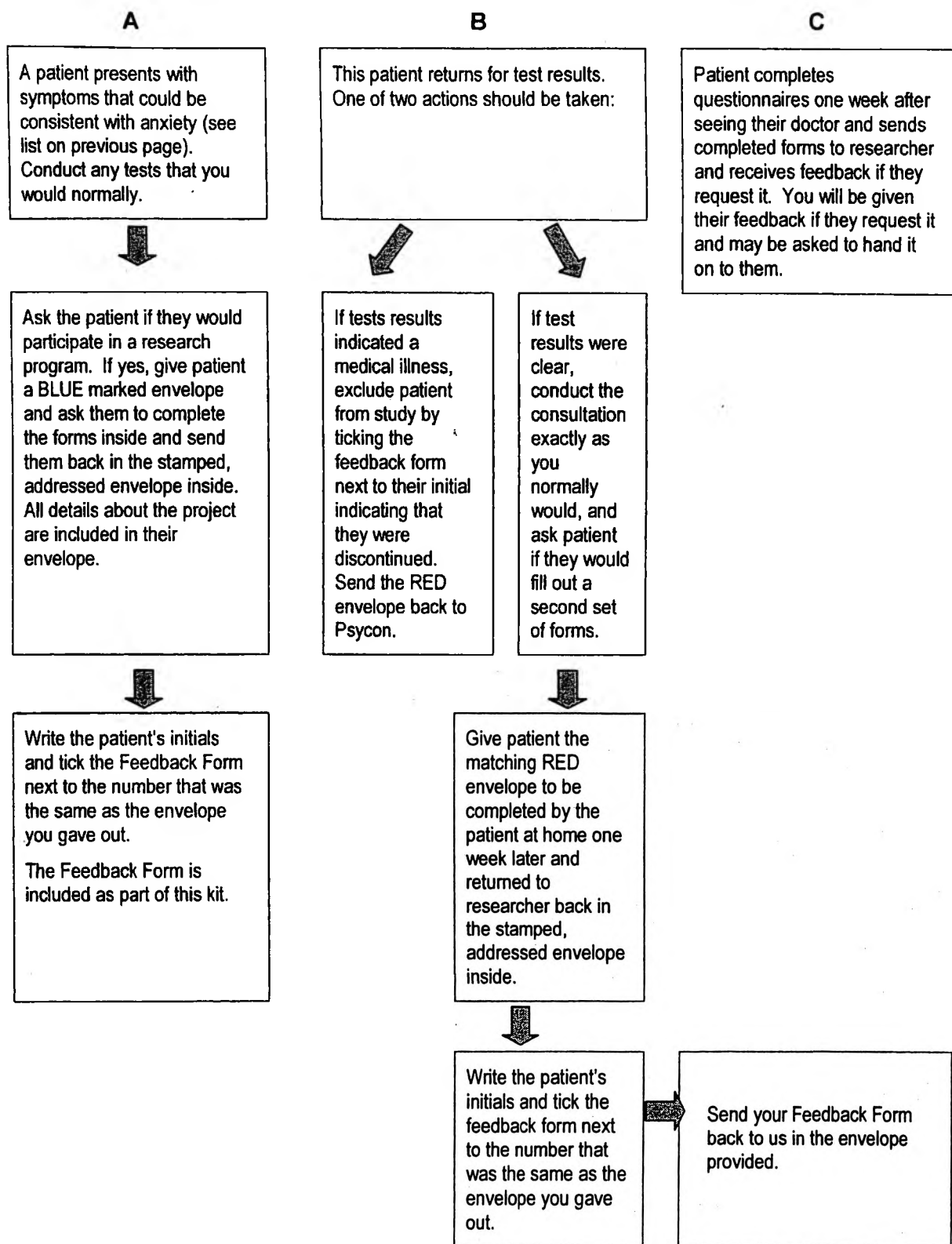
As you know, these symptoms might be attributable to physical illness/ disease, or they could have resulted from anxiety. Before you conduct any tests that you would routinely conduct with such patients, we'd like you to ask them if they'd be involved in a research study and give them one of the blue marked envelopes. When they come back to collect any test results, you will either:

- ☐ Exclude them from further participation in the study **DO THIS IF THE TESTS SHOW SIGNS OF PHYSICAL ILLNESS OR DISEASE.**
- ☐ Ask them if they'd mind completing the forms again, this time a week later. If they agree, give them their matching red marked envelope.

The Process Chart summarises this step.

# PROCESS CHART – Control Group

The following process is completed with 3 patients **BEFORE** completing training program.



✱ On 6-7 October you complete the training program ✱.

Please call Leah Giarratano or Joshua George if you have any questions (02) 9625 4369

# FEEDBACK FORM – Control Group

Please note: You should give matching numbered envelopes to the same patients. For example:

- ☐ Mrs Jane Smith (JS) would get BLUE envelope CX004 when she first presented with symptoms that could be consistent with anxiety. Her tests revealed no detectable physical illness. When she came back for the results Mrs Smith would get RED envelope CY004.
- ☐ Mr Howard Yates (HY) received BLUE envelope number CX005 when he presented with chest pains, but his test came back positive, so he was discontinued.
- ☐ Ms Kelly Jones (KJ) presented with dizziness and breathlessness- she was given BLUE envelope CX006 when she first presented. Her tests were clear and she received RED envelope CY006 when she came back for the results.

Envelope Number	Patient's initials	Has this patient presented with these symptoms before?	Discontinued from study because of positive medical test results
CX004	JS	Yes	
CX005	HY	No	✓
CX006	KJ	No	
Example			
CY004	JS		
CY005			
CY006	KJ		

Envelope Number	Patient's initials	Has this patient presented with these symptoms before?	Discontinued from study because of positive medical test results



# Consent Form

**Project Title: Managing Health-Related Anxiety in General Practice**

**Researcher's Name: Leah Giarratano**

I have been given information about the research project titled *Managing Health-Related Anxiety in General Practice* that is being undertaken by Leah Giarratano, as part of her Doctor of Clinical Psychology degree supervised by Dr Craig Gonsalvez in the Department of Psychology at the University of Wollongong.

I understand that, if I consent to participate in this project I will be asked to invite some of my patients to complete questionnaires for Stage One of the project, and complete the same questionnaires one week after they return for a follow-up appointment if they are suitable for the study (please see information sheet for further details). When I am in the Experimental Group I will also explain their symptoms using a cognitive-behavioural rationale learned during the education program, and teach one or more of the arousal reduction techniques I learned during the education program.

I have been advised of the time burden associated with this research, which is around 5 minutes inviting patients to complete the questionnaires, and around 15 minutes to give the rationale and teach the arousal reduction exercise. I have been offered the opportunity to ask Leah Giarratano any questions I may have about the research and my participation.

I understand that my participation in this research is voluntary, I am free to refuse to participate and I am free to withdraw from the research at any time. My refusal to participate or withdrawal of consent will not affect my relationship with the Royal Australian College of General Practitioners.

If I have any enquiries about the research, I can contact Leah Giarratano on (02) 9832 9471, or her supervisor, Dr Craig Gonsalvez on (02) 4221 3674. If I have any concerns or complaints regarding the way the research is or has been conducted, I understand that I can contact the Complaints Officer, Human Research Ethics Committee, University of Wollongong on (02) 42214457.

By signing below I am indicating my consent to participate in the research entitled *Managing Health-Related Anxiety in General Practice*, conducted by Leah Giarratano as it has been described to me in the information sheet. I understand that the data collected from my participation will be used for a thesis, and possibly journal publication (although my name will not be published), and I consent for it to be used in that manner.

Signed

Date

.....

...../...../.....

Name (please print)

.....

## Appendix F: GP knowledge and confidence questions

### Knowledge Questionnaire

1. What cognitive and behavioural skills for managing health-related anxiety do you have that you are able to currently identify? (open)
2. Do you feel that you can currently teach a patient a variety of stress management techniques? If so, what techniques would you use? (open)
3. Do you think that you can stop a patient hyperventilating during a panic attack? If so, what would you do? (1)
4. What specific information does a practitioner require when conducting a behavioural assessment? (1)
5. Can you list four faulty or irrational thinking styles? (4)
6. What is the rationale for cognitive and behavioural therapy in addressing health-related anxiety? (1)
7. What specific information does a practitioner require when conducting a cognitive assessment? (1)
8. Name five ways that empathy can be communicated (5)
9. Name five types of patients who may not be appropriate for a CBT approach (5)

### Skill Confidence Rating Form

1. Helping your patient feel understood
2. Teaching a wide range of arousal reduction methods
3. Managing hyperventilation
4. Conducting a behavioural assessment
5. Conducting a basic cognitive assessment
6. Identifying the features of at least four common irrational thinking styles
7. Educating patients about the psychological contribution to many physical complaints
8. Identifying patients who would benefit from cognitive and behavioural strategies to address their health-related anxieties
9. Challenging irrational thinking in relation to health-related anxieties
10. Helping patients re-frame irrational statements to more neutral ones



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## About the authors and facilitators...

### ***Leah Giarratano***

*BA Hons MPsychol (Syd) MAPS M CCP*

Leah Giarratano is a Clinical Psychologist in private practice who specialises the assessment and treatment of PostTraumatic Stress Disorder (PTSD). She is a national training consultant to the Australian Centre for Posttraumatic Mental Health. She is a founding team member of the St John of God Hospitals, NSW national award-winning PTSD treatment program and is the author and Program Coordinator of an intensive Trauma Education Series for Clinicians. Leah has trained over 300 mental health clinicians in the trauma field. She has also been involved in the training of over 230 GPs nation-wide in the use of cognitive and behavioural therapy in General Practice. She has presented widely and is the co-author of several publications in the field of traumatic stress. She is an Honorary Clinical Supervisor for the Universities of Sydney and Macquarie, an Associate in psychology at the University of NSW, and an Honorary Fellow in Psychology at the University Woolongong, for their Masters of Clinical Psychology Programs.

### ***Lee James***

*BA Hons M.Psychol (Syd) MAPS M CCP*

Lee James is a Consultant Clinical Psychologist and has worked on this basis for a number of large organisations, including a specialist Anxiety Disorders Unit and an inpatient Post-Trauma unit. She has extensive counselling experience in both acute and chronic conditions and is in private practice in Sydney. Lee has taught undergraduate psychology at the University of Sydney and is an Honorary Clinical Supervisor for the University of Sydney Master of Clinical Psychology Program. She too has trained a large number of mental health clinicians and is a highly respected educator.

**All correspondence to be addressed to:**

Psycon Pty Ltd  
PO Box 877  
Mascot NSW 1460  
Phone (02) 9823 3374 Fax (02) 8786 1361  
Email: psycon@bigpond.com

# Introduction to the Program

A major source of frustration for many General Practitioners are those patients who present frequently with problems that appear to be mainly psychological, for example, high levels of anxiety, depression or somatic complaints for which no adequate physical intervention can be found. This is a problem universal to General Practice and assistance is not always easy to come by. Complaints that we have heard from GPs include:

- ◆ *Training programs in counselling skills talk a lot about establishing rapport, but little about practical interventions that follow once rapport has been gained.*
- ◆ *I have some idea about how to help a patient describe their life problems, but I have difficulty "closing down" the discussion and helping them move on.*
- ◆ *I am often aware that the symptoms my patient is describing have arisen from psychological origins, but it is very difficult to explain that to them when they are convinced there is a medical complaint.*
- ◆ *Training programs in psychological interventions tend to go over months or even years and are often too far away to attend regularly.*

This Psycon training program has been put together to address these needs specifically.

It is our aim in this program to introduce simple and effective assessment and treatment strategies that you can add to your repertoire of skills as a medical practitioner.

---

*This manual is a very important part of the program as it provides background information that will be used as the basis for the tools that will be taught over our two-day training program.*

---

The focus is on practical, relevant skill development that compliments medical interventions.

Please read the following manual before attending the two-day workshop. Please make notes of concepts that you are unfamiliar with, or that you are unsure about, and we will discuss these during the program.

**We look forward to meeting you at the program.**

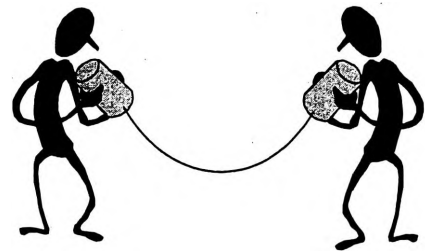


# The *PSYCON* Model

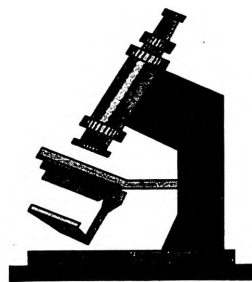
The model upon which our program is based is as follows:

## 1. Helping your patients to feel understood

This section of the program introduces the essentials to any therapeutic intervention- in particular sound listening and attending skills.



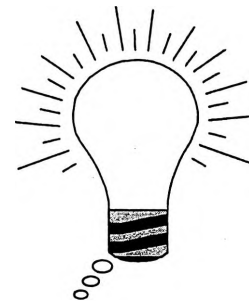
## 2. Identifying psychological contributions to the presenting problem



This component of the program introduces assessment strategies to help the practitioner identify behaviours and thinking patterns that are contributing to the patient's reported problems.

## 3. Making the link for the patient

In this part of the program a rationale is provided to engage the patient in the final stage of the intervention- the treatment phase. Unless the patient can understand why their doctor is recommending the cognitive and behavioural approach, it may prove difficult to initiate.



## 4. Strategies to reduce symptoms

This component of the program instructs in a variety of therapeutic strategies to reduce negative mood states and anxiety. Strategies to alter irrational thinking styles and reduce physiological arousal are demonstrated and practiced.



## Summary of the Psycon Model

1. *Helping your patients feel understood*
2. *Identifying psychological contributions to presenting problem*
3. *Making the link for the patient*
4. *Strategies to reduce the Symptoms*

RAPPORT  
ASSESSMENT  
RATIONALE  
THERAPY

## The Aim of Cognitive and Behavioural Strategies

- To increase control over behaviour and emotion.
- To develop a flexible, rational and evidence-based thinking style
- To change the way one thinks.

This program has been specifically developed to assist with those patients: for whom there's no obvious physical cause of their (often chronic) complaint, for those experiencing significant emotional distress, and for those with unhelpful habits.

You will be able to more comprehensively assess and treat these and other common presenting problems, by first considering the complexity and interactive dynamism of the human response.

## The Human Response

A significant number of patients present to General Practice with symptoms that are not solely physical illness responses. This manual outlines an introductory approach to their assessment and treatment. The human response is complex and interactive. The following diagram summarises the cognitive behavioural model of human behaviour:

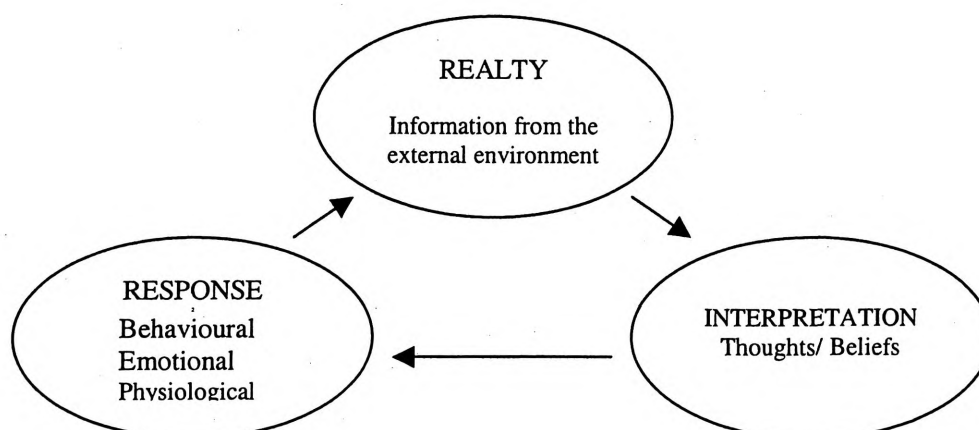


DIAGRAM: The Human Response interacts with external triggers and internal cues.

## The Human Response Continued

Triggered by environmental antecedents (eg. a smell or an event) or by internal cues (such as physical sensations or thoughts) a human will respond at several levels, each of which impact on the other. Put simply: **humans ACT, THINK and FEEL all at once.** The human response falls broadly into three primary expressions:



### *Example:*

A patient presenting with 'chronic fatigue' may complain of a lack of motivation (ie. behavioural symptoms) as well as a flat mood (ie. psychological symptoms) in addition to their physical symptoms (for example: swollen glands or fever).

## *Before you begin to read this manual*



When you see this cue, please complete the exercise or reading prior to attending the workshop.



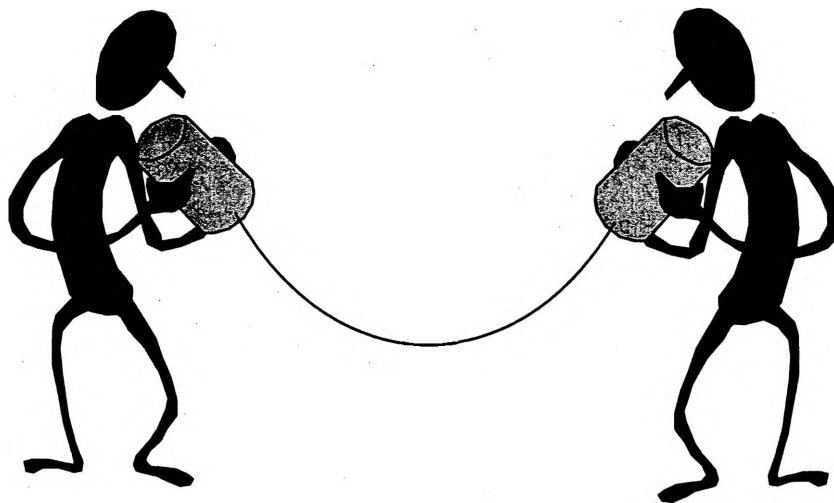
This cue means that we will complete the exercise in the workshop.

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# Rapport Building Strategies



STAGE 1

*Helping Your Patients to  
feel Understood*

# Rapport Building

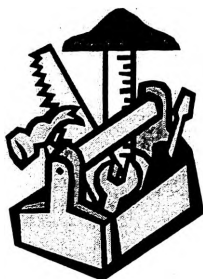
## Aims

This section will present an overview of the fundamental communication skills involved in helping your patients to feel understood.

## Objectives

After completing this section you will be able to:

- ❖ Recognise that careful attending can improve your overall interactions with your patients;
- ❖ Recognise the difference between reflective and active listening;
- ❖ Recognise the role that empathy plays in achieving a deeper level of understanding;
- ❖ Use summarising of your patient's words to assist them to facilitate their understanding of their own needs, and to assist you to move on to new topics; and,
- ❖ Recognise that different questions can help to challenge patients to examine their statements.



The basic communication skills of attending, reflecting and active listening are vitally important to therapeutic work, especially in its early stages, during which the practitioner attempts to engage the patient and build the rapport between themselves and their patient.

We recognise that most GPs are already proficient at communicating with their patients, and that for most of you, you are making your patients feel so comfortable that they feel free to disclose their problems. Hence your need or desire to come to this program.

We will therefore only be covering the basics of rapport building during this program- the parts that we feel are most important for developing a therapeutic relationship.

## Attending

Deep personal interactions require a certain intensity of presence. In a counseling situation, attending describes the way in which practitioners orient themselves to their patients in session, both physically and psychologically. As well as giving consideration to those conditions under which your consultations take place, it involves your careful observation of how, when, where and why the patient makes contact with their world. Having your full attention begins the process of helping the patient to feel understood and it encourages them to trust, to open up and explore with you the dimensions of their problem situation.

Orienting yourself physically towards your patient will help you to capture all of their facial and bodily messages, both conscious and unconscious. Observing your patient's non-verbal cues and responding appropriately will additionally help to facilitate the turn-taking behaviour rudimentary to effective communication.

This activity includes giving credence to important non-verbal cues, such as the posture a patient adopts and the gestures they use, their facial expressions and their tone and quality of voice, the patient's general physical characteristics and presentation, any changes in speech patterns and physiological responses such as blushing and quickened or slowed breathing.

Rather than allowing themselves to feel intimidated by silences and pauses that will occur in this communication process - as in any other - the highly effective practitioner makes deliberate use of these breaks as tools, perhaps simply to allow the patient some time to think through what has just taken place, or to get in touch with their deeper feelings and any insights that may have been provoked before continuing.

## Reflecting

Reflecting involves making simple responses that indicate to the patient that you are not only listening to them, but are hearing what they are saying. This form of listening demonstrates clearly that the practitioner is present for the patient and may be a very simply applied key to the patient continuing their initial involvement in the process.

As the practitioner, your task in this activity is to listen very carefully as the patient speaks to you and frame an appropriate response which reflects the core message the patient has expressed, in terms of either its **Content** or **Feeling**.



These have a different impact upon your patient and the course of your conversation. Correct use of reflecting can often de-escalate an argument. Incorrect use can mean that conversations with patients that you are trying to wind down or make more specific can open up, and become more general.

## Reflecting Formula

REFLECTING CONTENT	REFLECTING FEELING
Just mirror back the words you heard, literally what your patient said	Listen for the emotion behind your patient's words and say, "You Sound..." (insert emotion you think you heard)

Consider the following examples:



STATEMENT	REFLECTED CONTENT	REFLECTED FEELING
"I had a great holiday. I'm so glad I went."	"So you had a great holiday" or "You're really glad you went"	"You sound happy"
"I'm sick of having to clean up after everyone."	"You hate picking up after us"	"You sound angry" or "You sound tired"
"I feel like I might be going crazy. I just don't have any control anymore."	"You feel like you've lost control" or "You think you're going crazy"	"You sound scared"

## Questions to consider...

What impact do you think reflecting CONTENT might have on the course of your conversation?

What impact do you think reflecting FEELING might have on the course of your conversation?

We'll discuss this further in the workshop.

## Active Listening

The process of active listening involves paying attention to the words your patient uses, listening for the key messages contained therein, while additionally becoming aware of their non-verbal cues. It then involves responding to what they have said in ways which are intended to allow further exploration of their problem situation or the issues they have raised in session with you.

### **Active listening:**

- ❖ acknowledges the patient's contribution
- ❖ demonstrates to them your current understanding of the situation
- ❖ affords the opportunity for immediate confirmation or modification of this information by the patient

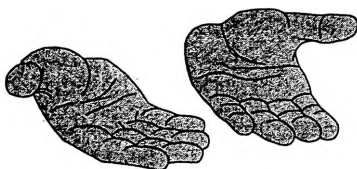
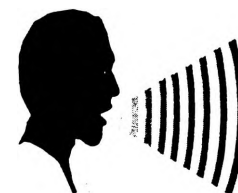
**As a doctor in general practice, your own active participation in consultations of a more psychologically therapeutic nature may have developed in a layered fashion, as in the pattern suggested below:**

Encountering emotionally charged or sensitive situations during consultations is likely to have initially brought about an increased alertness on your part. Such an aroused state would have allowed additional efforts on your part to be directed towards careful listening and to engaging in those behaviours with your patients which would demonstrate that you were paying close attention to them in the situation.



Then, while you were feeling your way, perhaps without even using actual words at this stage, you may next have made some very simple responses to the things your patients said or to the feelings they were expressing while they disclosed to you the details of their circumstances.

As you developed confidence in responding to your patients' special needs, afterwards you may have learned to make other responses that facilitated these interactions. For instance, you may have echoed the words your patients used or applied simple paraphrasing in your response to indicate to them what you had heard.



Later, the comments you made when responding to your patients during such consultations broadened in scope so that you were able, in this manner, to impart to them your understanding of their complete situation - not only of the details of their story but also of how they experienced it.

## Empathy

To achieve a greater level of self-understanding, patients will often need to shift from their current frame of reference to some other more objective or more reasonable perspective. This prospect becomes much more likely when the empathy that is expressed within the therapeutic relationship is accurate and the timing is right. Clear communication between practitioner and patient is a feature vital to the effective application of this complex skill.

***To respond empathetically, the practitioner attempts to:***

- ❖ sense how their patient is feeling
- ❖ see how these feelings are linked to particular people or events
- ❖ understand how the patient experiences each situation, and then
- ❖ communicate this understanding clearly to their patient.

***Making use of empathy in framing your responses incorporates a more managerial role for you as the practitioner in that it involves:***

- ❖ identifying themes
- ❖ connecting issues
- ❖ summarising core material
- ❖ suggesting alternative perspectives
- ❖ helping the patient to draw conclusions from premises
- ❖ being able to sense meanings that the patient may scarcely be aware of themselves or have merely implied.

## Summarising



Summarising involves the systematic presentation of relevant material; that is, restating to the patient your understanding of the things they have said which seem pertinent to their concerns. As a tool in therapeutic work, it can be employed when sessions are looping; for example, when the same issues keep coming up or the patient seems to be continually blocking further progress.

Summarising may be used to prompt your patients to explore a concern or theme more thoroughly or it may add direction and coherence to their process of further self-exploration. It can assist patients in focusing their attention on the issues that matter and to bring together the scattered thoughts and feelings that have emerged during a session or a series of consultations.

Taking the opportunity to summarise may have the effect of allowing closure of the discussion about a particular topic if that is the best course indicated or alternatively, it can act as a subtle invitation to the patient to investigate the implications of the position at which they have thus arrived.

## Questioning

Questioning is a tool that can be used to draw further detail and discussion from the patient in order to more fully understand them in the context of their situation. Questions should be asked with the purpose of either helping the patient's progress or improving your understanding of a critical matter; that is, they are not to be asked simply to elicit information to satisfy a practitioner's curiosity.

When used to elicit further or more detailed information, questions will ideally be open-ended. The most potent questions are short, focused on one idea only, and are relevant to the topic. Open-ended questions are ones that cannot be answered in just a few short words. By their very nature, they encourage others to talk and to provide you with information. Typically, open questions will begin with such words as "what", "how", "why" or "could". One example is "How are you feeling today?"; another, "Could you tell me a little bit more about that visit?"

Closed questions, on the other hand, can be answered with only one or a few short words. They will not often evoke long responses when applied and are, in fact, most likely to be met with a simple "yes" or "no" answer, leaving the impetus

of the interaction with you. Closed questions often begin with "is", "are", "do". Examples might be "Are you living with your family?" and "Do you think he was right?" Not to be ignored, however, this type of question can be employed with purpose during discussions with your patients if you want to obtain specific information or perhaps focus them on the issue at hand.

Posing a question can also be a technique by which a skillful practitioner is able to offer patients an alternative viewpoint to their own in a way which allows it a better chance of being considered. "Don't you think it would have been more helpful if you had studied for the test earlier?", for instance, offers a less confrontational approach than baldly stating such a view.

Some other hints that might be helpful to remember: Questions opening with the word "what" are most likely to lead you to factual information; for example, you might ask "What happened then?" or "What colour is that coat you're wearing?" Questions beginning with "why" will often instigate a discussion of reasons, in the sense of "Why did you let that stop you?" or "Why did you think they weren't in?"

## Questioning



Can you identify several of the differences between open and closed questions? What are some of the effects on communication that can be produced by using each type?

_____	_____
_____	_____
_____	_____



Which of these following questions are open or closed?

- ❖ *Do you come here often?*
- ❖ *How do you feel about that?*
- ❖ *Where do you live?*
- ❖ *Do you get along with Joe?*
- ❖ *What important things have happened this week?*
- ❖ *Could you tell me more about that experience?*

Be aware that your choice of open or closed questions does have an influence upon the type of response you generate. If you are trying to help a person to open up and explore their feelings, which type of questioning should you use? If you would like to help a person be more specific about a symptom or particular part of a problem, which type of questioning should you use? If your patients are continually speaking for longer than you would wish- check your questioning- are your questions all open? Change to closed questions and observe whether you note any changes.

## Challenging

Human beings are not always entirely rational and the mental images and thoughts we have - our cognitions - are not always based in reality. Everyone constructs their reality to some extent in the way we come to understand our experiences. Sometimes these alternative or subjective realities we construct contribute to our problem situations. The use of challenging can help patients to examine these constructions and the implications that follow from them. Areas in which patients may need to be challenged include:

- ❖ refusal to take responsibility for the problem situations in their lives,
- ❖ inability to define problems in solvable terms,
- ❖ unrealistic interpretations of events, experiences, behaviours and feelings,
- ❖ game-playing in session (eg. evasiveness and defensiveness, distortions),
- ❖ failure to identify or understand the consequences of behaviour, unwillingness to act on insights gained.

Patients will not always demonstrate a willingness to explore themselves and their concerns fully. The same applies when these concerns are of a deeply personal, emotional or sensitive nature. At times, it will be necessary to encourage, prompt and help patients to explore their issues when they do not do so spontaneously or beyond the level that the application of basic empathy and good interpersonal communication skills might draw them to.

Do not view this as confrontational or aggressive behaviour on the practitioner's part. Challenging is a tool, an extension of other communication fundamentals already discussed. Challenging is an invitation to patients to examine internal (cognitive) and external behaviours that seem to be self-defeating or harmful to themselves or others, and to try to change that behaviour.

Challenging when used effectively helps increase the patient's sense of self-responsibility and enables them to develop alternative perspectives to clarify a problem situation.



*You will learn more about challenging particular cognitive mindsets in the following sections.*

*Let's now turn to an exercise that helps us to look at our own mindsets, and to consider what impact this may have upon our helping relationships, and ability to build rapport with patients.*

## The Helping Practitioner's Audit

The aim of this exercise is to raise your awareness to the fundamental conditions and personal attributes involved helping relationships.



### Homework Exercise

After completing this exercise you will have identified areas to target for development. These areas will enable you to improve your ability to *help your patients feel understood*.

Please answer YES or NO to the following statements. You will not be asked to reveal any aspect of this exercise at the workshop. This is a personal self-awareness exercise only. Please use the following pages to list the areas that you have answered NO to. Try to come up with two suggestions for improvement in these areas.

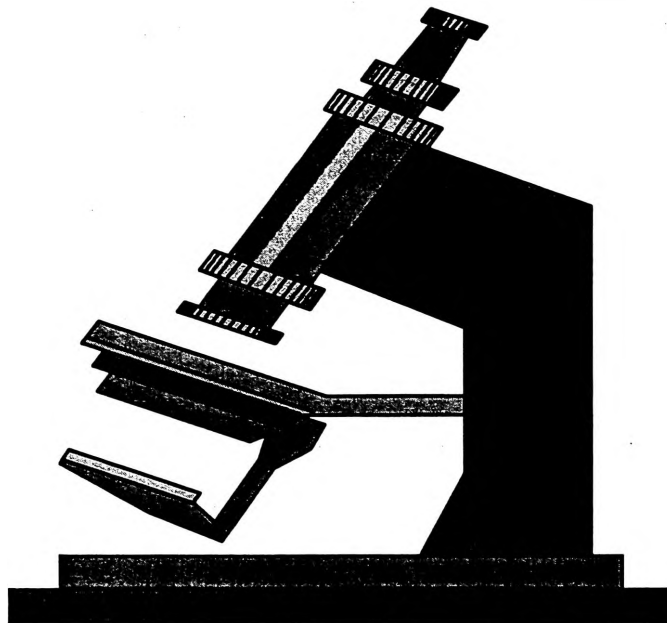
	YES	NO
1. I keep interruptions and distractions to a minimum during sessions with patients.	<input type="radio"/>	<input type="radio"/>
2. I orient myself physically toward the patient during consultations.	<input type="radio"/>	<input type="radio"/>
3. I orient myself psychologically toward the patient during consultations.	<input type="radio"/>	<input type="radio"/>
4. I maintain an open, relaxed and comfortable body posture with patients	<input type="radio"/>	<input type="radio"/>
5. I maintain a reasonable amount of direct eye contact with the patient (take your cue from how each individual responds).	<input type="radio"/>	<input type="radio"/>
6. I make attempts to understand and value diverse groups in the community.	<input type="radio"/>	<input type="radio"/>
7. I make attempts to understand and value individuals.	<input type="radio"/>	<input type="radio"/>
8. I am non-judgmental in my dealings with patients.	<input type="radio"/>	<input type="radio"/>
9. I am honest and genuine with patients.	<input type="radio"/>	<input type="radio"/>
10. I treat patients with respect.	<input type="radio"/>	<input type="radio"/>
11. I maintain patient confidentiality.	<input type="radio"/>	<input type="radio"/>
12. I show consideration for my patient's welfare.	<input type="radio"/>	<input type="radio"/>
13. I express a reasonable level of warmth or friendliness.	<input type="radio"/>	<input type="radio"/>
14. I am able to create a supportive therapeutic environment.	<input type="radio"/>	<input type="radio"/>
15. I am able to listen to and respect patient's concerns.	<input type="radio"/>	<input type="radio"/>
16. I try to fully understand the patient's feelings, yet maintain perspective.	<input type="radio"/>	<input type="radio"/>
17. I view patients as responsible for their own lives and capable of determining their own fates.	<input type="radio"/>	<input type="radio"/>
18. I am able to separate myself from my patients when they leave my office and not worry about them for the rest of the day.	<input type="radio"/>	<input type="radio"/>
19. I am aware of the biases and prejudices I have towards others and make efforts to challenge them so they do not limit my growth and self-development.	<input type="radio"/>	<input type="radio"/>







# Assessment Strategies

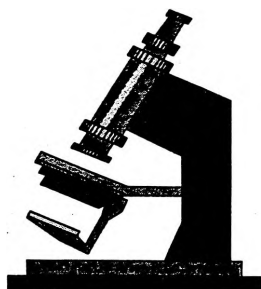


STAGE 2

*Identifying Psychological  
Contributions to the  
Presenting Problem*

# Introduction

## Aim of this Component



This component of the program introduces several brief cognitive and behavioural assessment strategies to use within your consultation. These will help you identify behaviours and thinking patterns that are contributing to the patient's reported problems.

Under the heading 'Behavioural Assessment' you will find three excellent methods for clarifying and structuring a patient's problem. The Cognitive Assessment section will then provide a method for identifying dysfunctional thinking patterns.

## Psychological Assessment

The function of a psychological assessment is the same as for a medical assessment: One is trying to gather more information about the presenting problem with a view to trying to establish its cause(s). Having a greater understanding about the origins of the problem will determine the direction you will take to help reduce it.

Unlike medicine, perhaps, the goal in Cognitive and Behavioural treatment is not necessarily to 'cure' the problem, but to generally improve quality of life by reducing unhelpful beliefs and behaviour patterns. Consider the metaphor of a journey, or a road through life to help delineate this - we are all striving to improve our condition in life; we will probably never reach 'perfection' (however we imagine that to be); but most of us continually strive for improvement. Sometimes there are obstacles on the road (eg. fears; self-doubt; anxiety); or we may lose the energy to move forward (eg. depression); or we may get stuck in the same spot (eg. repeating patterns of behaviour or thinking that are no longer useful, or helpful). The strategies in this program are designed to help reduce these impediments so that forward progress can continue.

Many doctors have told us that they often feel overwhelmed when there are psychological contributions to their patient's presenting problem (eg. they present with symptoms of depression; lifestyle problems; or anxiety symptoms). Our past participants have often said:

- "There's so much information and I'm not sure how to make sense of it all, or give it some kind of structure."
- "Once they've told me the problem, I don't know how to move them forward - I don't know the next step."

This section of the program is designed precisely to address these two concerns - how to make sense of the problem, and design a road map (treatment strategies) to move forward.

# Behavioural Assessment

## Objectives

By the end of this section you will be able to:

- ◆ State why behavioural assessment is important
- ◆ Name three approaches to exploring the parameters of a patient's problem
- ◆ Complete a behavioural assessment from a case example

## Introduction

A behavioural assessment, or behavioural analysis, is a systematic method of collaboratively examining the patient's problem and the context they occur in. The assessment also sets the dimensions of the therapy. It establishes exactly what the problem is and often points to the changes that can be made to reduce or solve the problem.

The whole aim of a behavioural assessment is to make a problem as clear and concrete as possible. The founding behaviourists believed that we cannot scientifically study anything that we cannot see - therefore, that the only valid form of psychology was the study of **observable** human behaviour. This rigid point of view is outdated today, but many of the principles that were developed then are still extremely useful.

A behavioural assessment helps to specifically describe what happens when a problem behaviour or emotion takes place. Both you, and your patient will gain a clearer understanding of what their problem actually is. Behaviour Therapy asserts that an individual's behaviour is related to events and **consequences** in the environment. If we can alter the consequences, very often we can alter the preceding behaviours. We will assert that the role of cognitions is also critical in determining a patient's behaviours and responses, and this will be elaborated in the Cognitive Assessment section.

The three behavioural assessment strategies we will cover in this program include:

1. The Fly on the Wall Technique
2. The Before / During / After Technique
3. The First, Worst, Best, Most-Recent Technique

# 1. The Fly on the Wall Technique



Patients may come to see you with very clouded, confused and abstract descriptions of their problems. The objective of the Fly on the Wall Technique is to make concrete the vague words they are using into objective, observable actions. Another, less friendly term for this technique is **operationalisation** of behaviour.

A clue to knowing whether you have operationalised the words the patient is using is to ask yourself: "Can I see, feel, hear or touch the words this patient is using?" Could you have been a fly on the wall watching the behaviour taking place? For example, the patient may talk about their desire for a "better relationship". Because you cannot see, feel, hear or touch a "better relationship", you would need to have this concept explained to you so that you can make it concrete. Ask, "What would it be like if you had a better relationship?"; "What specific things would your partner do that would make you feel that you had a better relationship?" (For instance: "I wish my partner would hug me more and ask me how my day went").

One of the most useful questions you can ask is: "If I was watching you, how would I know that you were"... (sad, angry, hopeless, etc).

Really listening to what a patient says, asking them for clarification and operationalising their statements really shows the patient that you are interested, it helps you to truly understand their worldview and situation, and it helps to set specific goals for behaviour change. It also makes sure that you are both talking about the same problem. We will work through some examples using this technique in the Workshop.

# 2. The Before / During / After Technique

This technique involves investigating what happened immediately before a problem behaviour or situation (ie. the antecedent events); the resultant behaviour that occurred; what the patient did after that behaviour, and what else occurred in the environment.

- |  |               |
|--|---------------|
| ◆ What happened immediately before the problem | <b>BEFORE</b> |
| ◆ What the patient did during the situation    | <b>DURING</b> |
| ◆ What happened immediately after              | <b>AFTER</b>  |

For any given problem, changes may be possible at any of these stages. This part of a behavioural assessment aims to identify what might be maintaining a problem and what can be changed. To make the most of this skill, we will need to look a little into Learning Principles.

## Reinforcers and Reinforcement Patterns

It is important when conducting a behavioural assessment that one is aware of how behaviour develops and maintains itself through a system of rewards and punishments, or **reinforcers**. At the simplest level we can state that whatever follows a particular piece of behaviour will influence the probability of that behaviour occurring again. Attention can be an important reinforcing factor. Consider the child who cries when she falls over. If a lot of fuss and attention, and even food, is given to her when she cries, she is likely to cry the next time she falls over. One area to pay particular attention to therefore, is what occurs immediately after a particular behaviour and to note whether this could be reinforcing.

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whatever follows  
a particular piece  
of behaviour will  
influence the  
probability of that  
behaviour  
occurring again

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## Useful Questions For the Before / During / After Technique

*To discover what happened **BEFORE** an event or distressing emotion occurred:*

- "What happened just before you got angry / felt sad / became anxious?"
- "What were you doing?"
- "What were they doing?"
- "Could you just step back and describe the event step-by step?"
- "What did you feel before it happened?"
- "Where did this occur?"
- "What else was going on?"
- "Who else was there?"
- "Have we missed anything important?"

*To discover what happened **DURING** the event:*

- "What did you do?"
- "What did you say?"

*To discover what happened **AFTER** the event or distressing emotion occurred:*

The essential point here is to discover what specifically happened as a result of the above.

- ♦ "Could you summarise what happened for you as a result?"
- ♦ "How did this affect the other person?"
- ♦ "How did you feel when it was all over?"
- ♦ "Do you think that anything in the environment influenced your behaviour or anyone else's?"

### 3. The First, Worst, Best, Most Recent Technique

Another way to explore the parameters around which a problem occurs is simply to ask these questions:

- ◆ “When was the first time you remember this happening to you?” (FIRST);
- ◆ “What was the worst example of it happening?” (WORST);
- ◆ “Has there ever been a time when the problem wasn’t so bad?” OR “Are there any conditions which reduce this problem?” (BEST);
- ◆ “When was the last time you remember this happening?” (MOST RECENT).

This technique can be used to discover the conditions that exacerbate or relieve a problem and when and how the problem may have originated. This can help you to identify interventions to reduce the problem (eg. by increasing conditions that reduce the problem, or removing conditions that exacerbate the problem).

## Summary

A behavioural assessment, or behavioural analysis, is a systematic method of collaboratively examining the patient's problems and their environment.

You now know three quick and effective methods for breaking a patient's problem down. These are:

1. The Fly on the Wall Technique
2. The Before / During / After Technique
3. The First, Worst, Best, Most Recent Technique

# Cognitive Assessment

## Introduction

Cognitive-behavioural approaches assert that a person's behaviours and their feelings are intimately linked to the way that they think about themselves and their world. Sometimes we the way that we think is unrealistically pessimistic or we set standards and expect things that are unlikely to happen. Some people selectively attend to the negative aspects of their experiences and ignore neutral and positive things that occur. All of these ways of thinking about, or interpreting experiences can leave people feeling unnecessarily angry, depressed, worthless or guilty.

In order to change these ways of feeling we need to change the thought processes that lead to them. We cannot change the way that we think however unless we are aware of negative thinking habits and their effect on our emotions and behaviour. Cognitive assessment strategies are aimed at helping people determine the usefulness and validity of their thinking patterns and their effect on their mood and habits.

At the end of this section you will be more aware of:

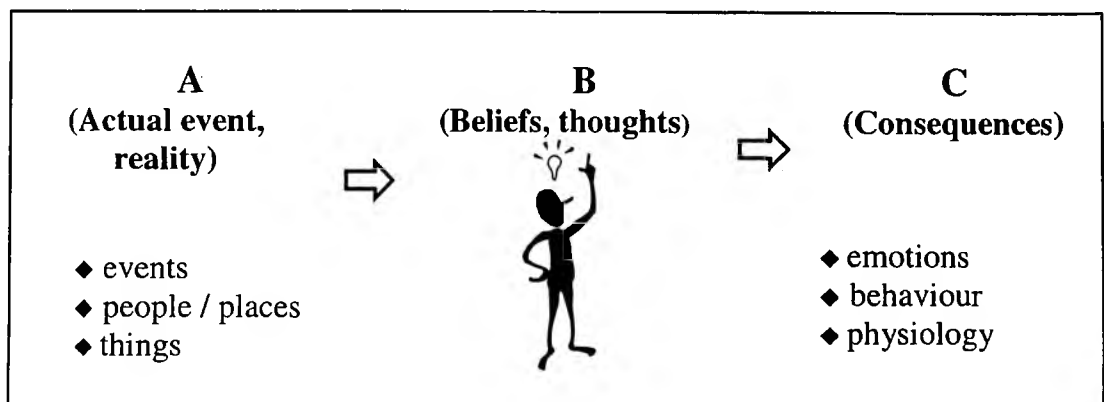
- ◆ the impact that our thinking can have on what we feel and what we do;
- ◆ that outside events don't cause our responses as much as how we interpret those events; and,
- ◆ that negative automatic thinking styles often become destructive habits through repetition.

### *In principle:*

1. Behaviour and emotion are linked to thinking
2. Interpretation (of experience) creates response
3. Responses are learned and can become automatic.

## 1. Behaviour and emotion are linked to thinking

An individual's response is most often a direct result of how they think about the information that they perceive from their environment, as represented below:



Thoughts always come before feelings and action, even if we're unaware of them. Some people find this very difficult to accept or understand- a patient once said:


"Hang on! It can't be true that you think before you act. Sometimes I just act without thinking at all. In fact, sometimes it's pure instinct - I just react straight away."

This patient was a Vietnam Veteran, he gave the following example of acting 'without thinking': Shortly after his return from Vietnam he was traveling along a freeway when a rock suddenly hit his windscreen. He instantly swerved the car off the road and got down under the dash board:

*"If I had been thinking, I never would have hidden under the 'dash. I could've hit another car or even killed someone. I wasn't thinking, I acted on pure instinct."*



Let's look closely at his response:

<b>A</b> <b>(Actual event, reality)</b>		<b>C</b> <b>(Consequences)</b> <b>Emotion:</b> Feels shocked and fearful. <b>Behaviour:</b> Swerves off the road, ducks down beneath the dash board.
A recently returned war veteran is driving along a freeway when a rock suddenly hits the wind-screen of his car.		

This patient believes he leapt immediately from the actual events to his response because he reacted on impulse with lightening quick reflexes. Can you guess what he was *probably* thinking?

We can easily imagine that the man in the example above thought: "It's a bullet!!". It was this thought - and the belief that he was in danger - that caused his emotions and behaviour; not the event or simply the rock itself. That is:

<b>A</b> <b>(Actual event, reality)</b>	<b>B</b> <b>(Beliefs, thoughts)</b>	<b>C</b> <b>(Consequences)</b>
A recently returned war veteran is driving along a freeway when a rock suddenly hits the wind-screen of his car.	"It's a bullet!!".	<b>Emotion:</b> Feels shocked and fearful. <b>Behaviour:</b> Swerves off the road, ducks down beneath the dash board.

His reaction makes far more sense when it is preceded by this thought- in fact it makes perfect sense for him to do what he did if this was his belief. It is very important to note here however, that this belief was *incorrect*.



## 2. Interpretation (of experience) creates response

*"Nothing is good or bad, but thinking makes it so."*

*Shakespeare*


An individual only responds to that which has personal significance. That is: if something has no relevance to us we either actively don't attend to it and therefore don't react, or we interpret in a neutral way by simply observing it.

Thinking requires attributing meaning to those things to which attention is paid- the way in which we do so may reflect positive or negative interpretations, or they may simply state the facts neutrally. That is,

Interpretations can be:

- ♦ positive
- ♦ negative
- ♦ neutral

*Example:* The use of a simple analogy is useful to illustrate the difference in the three interpretive styles. Compare the following responses to half a cup of coffee:

	Positive Interpretation:	"Half full"
	Negative Interpretation:	"Half empty"
	Neutral Interpretation:	"Half a cup"

What happens in reality just IS, how we interpret it depends upon our current mood state and competing sensation, but is largely a product of prior learning experiences.

### ***Self-Talk Represents Interpretation***

Self-talk are the thoughts we are aware of having. Self-talk is what we say to ourselves about what is happening around us. As we have been discovering, this will be influenced by how we interpret what is happening, so our self-talk may not always be an accurate representation of what is going on around us.

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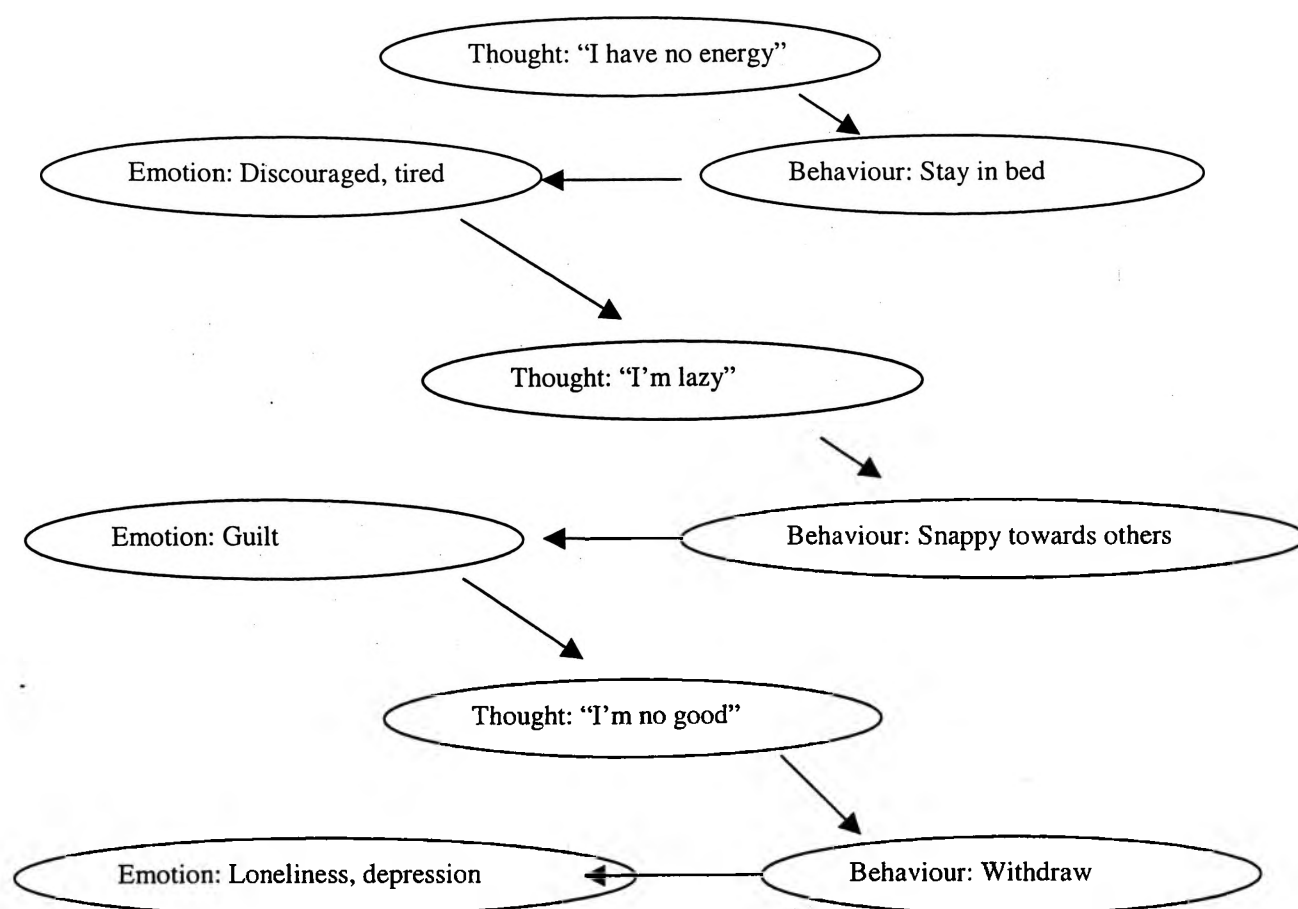
Self-Talk	What we say to ourselves about the things that we experience. It can be either realistic or unrealistic, and both affects and reflects how we feel, act and respond.
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We have been learning that the way in which a person responds to their immediate experience is determined by how they think. Their current thought (or 'self-talk') impacts directly on their emotional and physical response. In the following example observe how Bob's self-talk leads him further and further into a negative cycle of depression because of what he attends to.

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**Example:** Bob is depressed. Note how his behaviour and emotional responses are related to his thoughts as represented below:

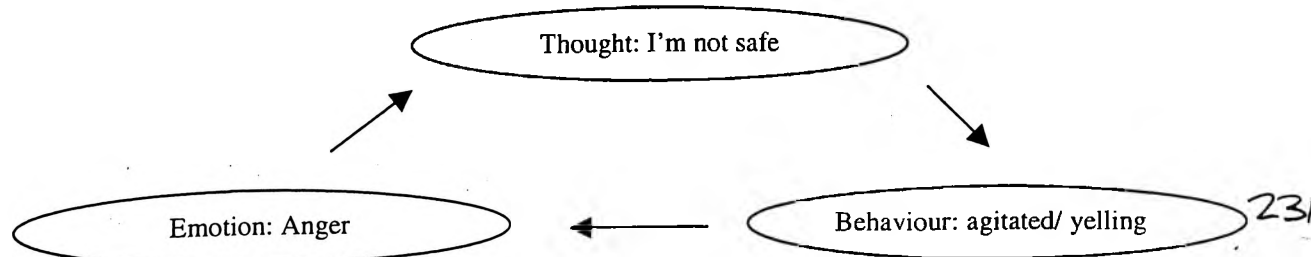


### Automatic Self-Talk



Through repeated association self-talk statements can trigger a certain mood or behaviour through the processes of regular pairing and habit. The frequent pairing of a particular mood (eg. anger) with a set of associated habitual thoughts (eg. "I am not even safe in my own country", "Violence is rife these days!") cues the response (eg. rage and lashing out physically). People can very quickly therefore slip into a negative mood state when they experience a particular self-talk statement.

The automatic response is made stronger when reinforced physiologically (eg. hyper-arousal and agitation).



### 3. Responses are learned and can be automatic

Learning shapes our responses: an individual's behavioural and emotional repertoire is a direct product of their experiences over time. Repetition of experiences serves to reinforce thoughts and/or behaviour; developing knowledge and habit through a process of association.

With repetition, thoughts can become automatic. Thoughts may become so automatic that we are unaware that thinking even takes place. Consider the example of driving a manual car:



*Whilst driving, are you able to get from one point to another without being aware that you put your foot on the clutch to change gears?*

*Most people would answer "yes".*

*Now think back to when you first learned to drive a manual car - how conscious were you of putting your foot on the clutch? Most people would answer "very".*

The point here is that with habit and repetition, we become unconscious of our thinking and of our thought patterns. However, just because we are unaware of our thinking does not mean that our thoughts stop influencing our responses.

The fundamental assertion is that **thinking can become a habit**, and like most habits, can lead to dysfunction if left unattended. There are two primary processes involved in thinking:

1. Attention
2. Interpretation

Attention initiates thinking. The process of attending can become automatic by learned bias or selective attention. With repetition, thoughts too can become automatic.

#### *Example:*

Consider the case of Alfred who presents with insomnia. He describes himself as a 'worry-wart', note the effects his worrying (automatic) thoughts have:



	<b>A Actual events</b>		<b>B Beliefs</b>		<b>C Consequences</b>
1	Alfred cannot sleep as he is worried about being robbed.	→	"They always come when they think you're asleep." "I can hear my heart beat."	→	Alert and apprehensive. Cannot sleep and is hyper aware of any noise. ↓
		↓		←	←
2	Being alert and awake, Alfred perceives a noise. →	→	"Oh my God! I knew someone was out there!" "I bet they've got a gun"	→	Frightened and shaky. Hyperventilation and a panic.

## Automatic Negative Thinking Styles

## ANTs

Invalid and unhelpful thinking habits, can result in mood and behaviour disorders (eg. Andrew et al 1994; "mood traps" Burns 1980). Unhelpful thinking styles create Automatic Negative Thoughts (ANTs) which in turn create automatic negative moods. 4 typical ANTs are listed below:

### Black & White Thinking

A dichotomous, or all-or-none, thinking habit where everything is seen in black-or-white categories.

Eg. when a situation is anything less than perfect it is seen as a total failure, or a single event is seen as a never-ending pattern. Note: the use of *always* or *never*.



### Crystal balling

Jumping to conclusions: Interpreting things negatively when there are no facts to support the conclusion.

Two types are: MIND-READING (eg. arbitrarily concluding that someone's reaction towards you is / will be negative) and FORTUNE-TELLING (assuming or predicting that things will turn out badly.)

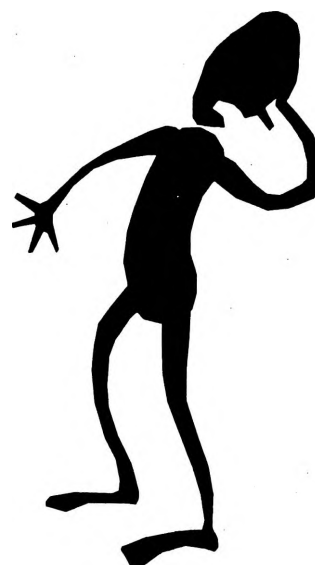


### Catastrophising

Holding yourself (or others) personally responsible for events that aren't entirely under your (or their) control. Attaching negative labels ("I am.." instead of "I do..") eg. "I am a loser" instead of: "I made a mistake".

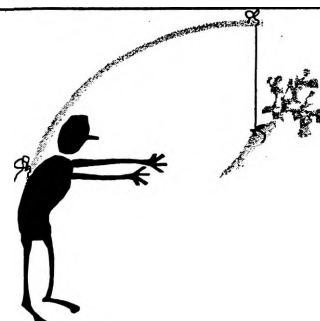
Exaggerating the importance of problems (catastrophising) or **minimising positives**. Eg. one word of criticism erases all praise received, insisting it "doesn't count" or that *anyone* could have done as well.

Note: "can't" and "haven't"; "dreadful" "awful". Also common here are the words "**What if...?**" and then considering the worst possible scenario; eg. "What if (she's 10 minutes late because) she died in a car accident?!"



### 'Shoulding' all over yourself & 'Must-erbation'

Telling oneself that things *should* be the way that they were hoped or expected to be. Many people try to motivate themselves only with shoulds or shouldn'ts (rather than using internally motivating phrases such as "I'd prefer to.." or "I would like to.."), almost as if they had to be punished before they could be expected to do anything.



# Think of the last time you were...

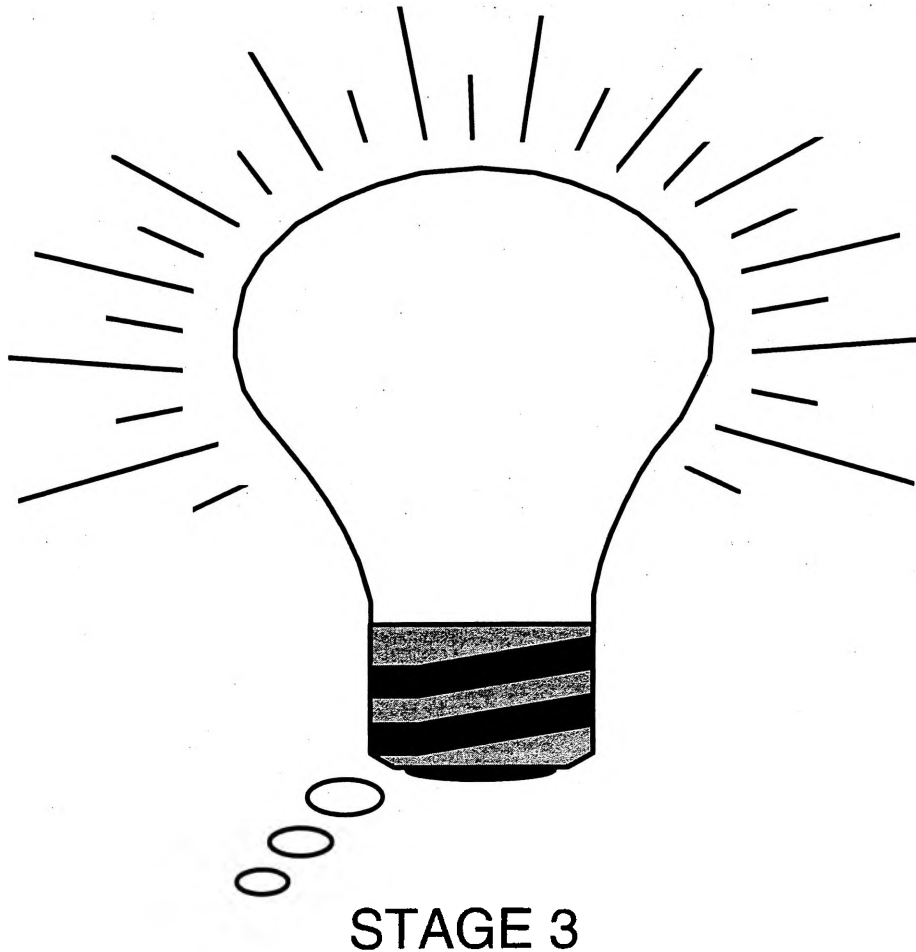
This is a self-awareness exercise only. You will not be asked to share your responses.



## Homework Exercise

<div style="border: 1px solid black; padding: 5px; display: inline-block;"><b>ANGRY</b></div> <p style="text-align: center;"><b>A</b> What Happened?</p>	<p style="text-align: center;"><b>B</b> What did you think?</p>	<p style="text-align: center;"><b>C</b> How did you feel &amp; react? SUDS ____/10</p>
<div style="border: 1px solid black; padding: 5px; display: inline-block;"><b>GUILTY</b></div> <p style="text-align: center;"><b>A</b> What Happened?</p>	<p style="text-align: center;"><b>B</b> What did you think?</p>	<p style="text-align: center;"><b>C</b> How did you feel &amp; react? SUDS ____/10</p>
<div style="border: 1px solid black; padding: 5px; display: inline-block;"><b>DISAPPOINTED</b></div> <p style="text-align: center;"><b>A</b> What Happened?</p>	<p style="text-align: center;"><b>B</b> What did you think?</p>	<p style="text-align: center;"><b>C</b> How did you feel &amp; react? SUDS ____/10</p>
<div style="border: 1px solid black; padding: 5px; display: inline-block;"><b>JEALOUS</b></div> <p style="text-align: center;"><b>A</b> What Happened?</p>	<p style="text-align: center;"><b>B</b> What did you think?</p>	<p style="text-align: center;"><b>C</b> How did you feel &amp; react? SUDS ____/10</p>
<div style="border: 1px solid black; padding: 5px; display: inline-block;"><b>EMBARRASSED</b></div> <p style="text-align: center;"><b>A</b> What Happened?</p>	<p style="text-align: center;"><b>B</b> What did you think?</p>	<p style="text-align: center;"><b>C</b> How did you feel &amp; react? SUDS ____/10</p>

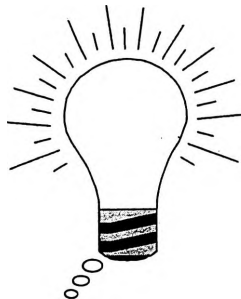
# The Rationale



*Making the Link  
for the Patient*

# Introduction

## Aim of this Component



In this part of the program you will learn the importance of providing a rationale to engage the patient in the final stage of the intervention - the treatment phase.

The aim of this component is to demonstrate various ways to provide a rationale for using psychological treatment techniques, with the intention that you find an approach that suits your style.

## Providing a Rationale

Unlike those visiting a psychologist, the patients who come to see you will be primarily concerned with their physical wellbeing. Most patients will expect their GP to provide a medical explanation for their problem, and perhaps write out a script to fix it. In many cases this is entirely appropriate. However when you have determined that there are significant cognitive or behavioural contributions to your patient's problem, you may want to suggest alternative strategies, or a combination of medication and psychological techniques. It may, at first, seem difficult to impart this to your patient, however unless your patient can understand why their doctor is recommending this treatment, it may prove difficult to initiate.

Participants from our previous programs have described some of their difficulties in recommending 'non-medical' strategies to their patients:

- "My patient is there for a medical cure, if I don't give them a script they think that I'm saying that it's all in their head"
- "I'm pretty sure that the way that they're thinking is making things worse, but I'm not sure how to explain that"
- "I feel like giving advice about what they should do, but that hasn't worked with them in the past, they keep doing the same things over and over"

Many of the assessment strategies from the previous component can be used to 'prove' the rationale to your patient. You will read more about this later.

It is very important to ensure that your patient feels you have understood their concern, and recognise it as legitimate, otherwise they may feel you have missed the seriousness of their problem, or do not consider it really important. This section will help you pave the way to introducing the treatment strategies in the next section.

## Assessment as Rationale

The assessment strategies you have learned in the preceding section will help you 'prove' to your patient that their thinking and/or behaviour can directly lead to the symptom that they are reporting. For example, if you can help your patient identify that they continually use Black and White thinking, you can help them to understand the impact that this has upon their mood (eg. feeling of anxiety because they are forever trying to meet impossible expectations). Your Before / During / After assessment may also demonstrate that previous behaviours can trigger further behaviours, emotions and thoughts.

## Treatment as Rationale

As your patients start to learn techniques that reduce their distressing symptoms they will also come to understand the link that you are trying to make between their behaviours, thoughts and emotions. For example, if by reducing their breathing rate their feeling of tightness in their chest also starts to reduce, the link will be proved.

Encourage your patients to be 'scientists'- testing your hypothesis about what could be happening. They should observe their symptoms and try one of the techniques you will teach them. If their symptoms begins to reduce, then the hypothesis is proved, if the symptoms do not improve, another technique can be tried, and you can both re-discuss the problem.

## Somatic Problems

This program aims to provide strategies for anxious and depressed patients presenting in General Practice. Sometimes these problems stand alone- for instance your patient may be depressed because they have a poor self-esteem. Sometimes however, the feelings of anxiety or depression may be secondary to an overriding general anxiety about their health. Such patients can be described as having a somatic problem.

Somatic presentations of psychological problems fall into three broad categories:

1. problems where there are observable and identifiable disturbances of bodily functioning;
2. problems where the disturbances are primarily of perceived symptoms, sensitivity to or excessive reaction to normal bodily sensations; and,
3. a mixed group. (Hawton, *et al*, 1991, p. 237)



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*Please note that some patients with somatic disorders may prove treatment-resistant and require referral.*

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Amongst the most common somatic problems seen in General Practice are insomnia, headache, irritable bowel syndrome and hypochondriasis. The rationale to begin to address these problems is the same that would be used with your anxious or depressed patient.

## Paving the Way

Using listening and attending skills to help your patient feel understood, and having conducted an assessment of contributing psychological factors, you will have demonstrated to your patient that you are genuinely concerned about their problem and its effects upon their life.

Once you are clear that there is not a physical illness state to fully account for their presenting problem, it is time to explain to them that their very real bodily sensations can result from their emotional reactions. That is, those physiological symptoms (eg, stomach-aches, shortness of breath, skin rashes, blurred vision, frequent urination, etc.) can arise from emotional states. An explanation that all human emotions have physiological correlates is useful, for example:



### LOVE:

- warm feeling all over
- 'butterflies'
- tightness across the chest
- lump in the throat

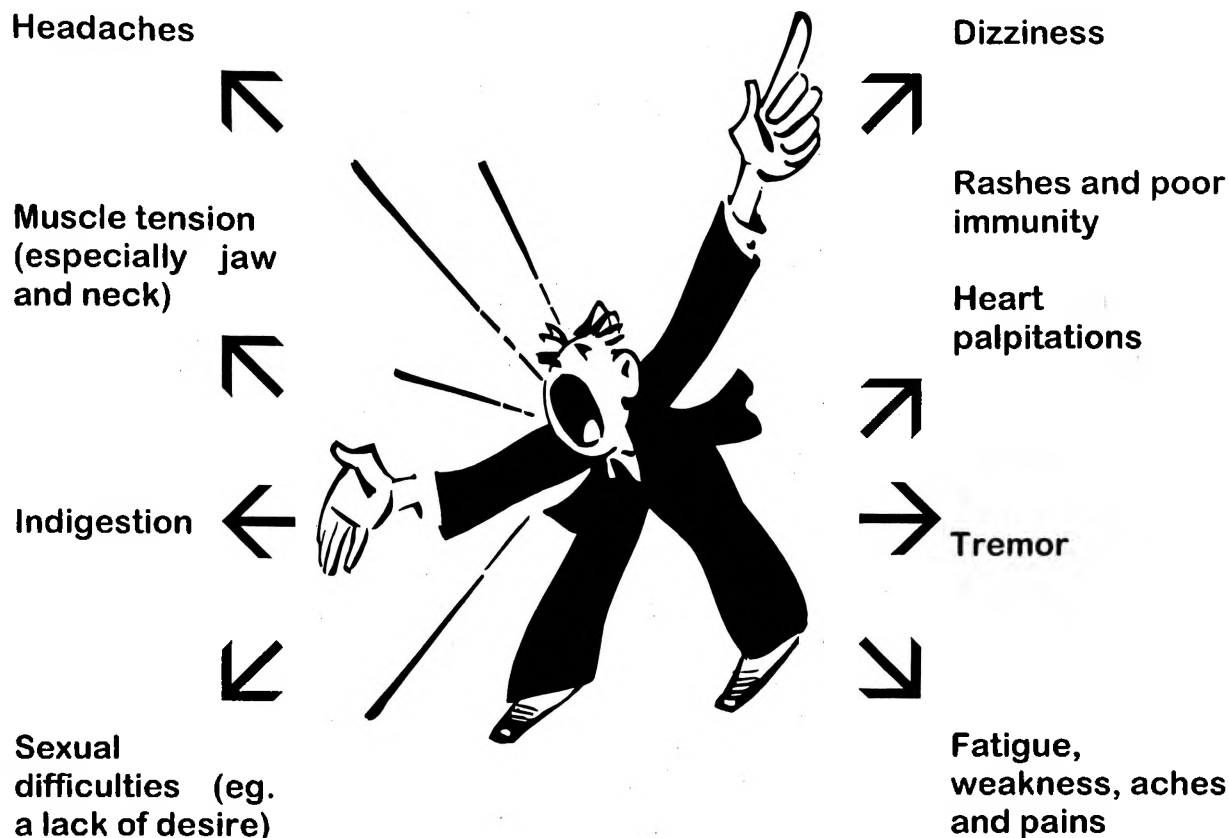


### ANGER:

- feeling hot
- muscle tension
- increased sweating
- clenched jaw

Many of the physical complaints may have chronic stress as their psychological origin. An explanation of how stress effects the body is important.

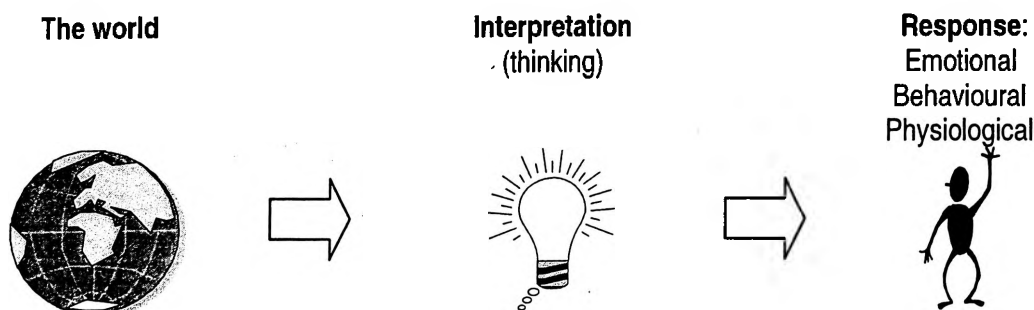
## The physical effects of stress...



## The Role of Behaviour and Cognitions

The next step is to explain that our thinking causes emotions and that we can gain some control over our thinking patterns (see Cognitive Therapy section). For example in a supermarket queue we will usually feel worse if we say to ourselves "I'm going to go crazy if I don't get out of here", as compared to "Not long to go now. I'm nearly there".

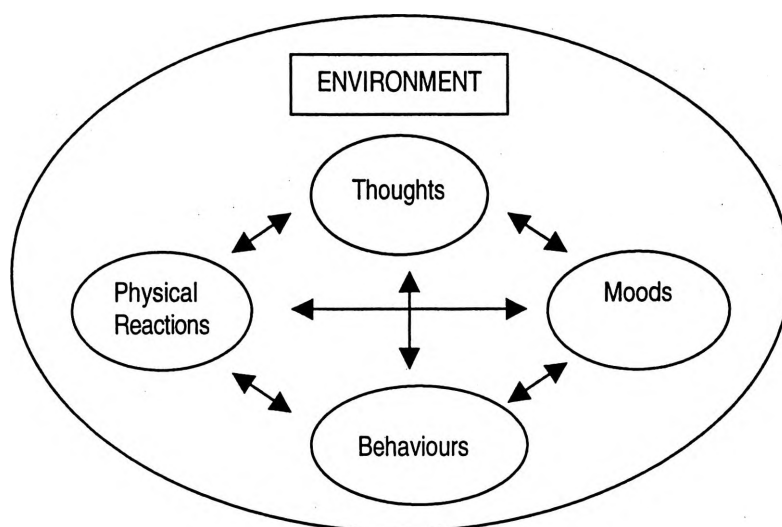
We can also change our behaviours in a way that will help to change our emotions. For example, many people find that if they are feeling down they can feel a little brighter if they get dressed up and go somewhere nice to eat. This shows that our behaviour can effect our emotions:



You can explain the model to your patients in whatever way you find effective. The following model may help you to clarify your thoughts, or you may decide to use it as it is.

Remember that your aim is to try to demonstrate that physiological symptoms may arise from thoughts and/or emotions. You may also want to show that emotions, or feelings can result from physiological sensations, etc.

You may find that drawing the following model for your patient will help you to explain the links.



Five Aspects of Your Life Experiences (Greenberger & Padesky, 1995)

This model is put forward by Greenberg and Padesky (1995) in their excellent book "Mind Over Mood: A Cognitive Therapy Treatment Manual for Clients" (which, by the way, is an excellent resource to follow on from this course).

The diagram encourages understanding about the patient's problems. It shows that our thoughts (beliefs, images and memories), our moods (emotions), behaviours, physical reactions and environment (past and present) are all interconnected. They all influence one another.

When working a patient, you will ask questions about these five aspects of their life. It is important to note that the five aspects are interconnected. Each different aspect affects all of the others.

Thoughts = beliefs, images and memories

Environment = past and present changes in the world around us

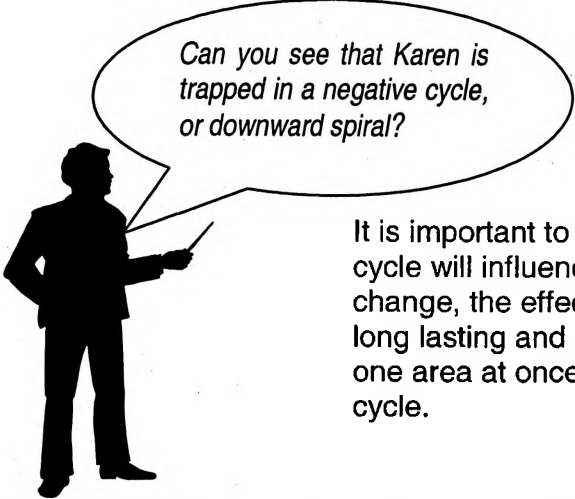
That is, the events that happen in the world around us (eg, a change in your job) will affect our behaviour (eg, have to get up earlier, travel further, and interact with different people). This in turn will affect how we think and how we feel both physically and emotionally.

Equally, how we think and what we believe about ourselves and our world will affect what we do and our emotions, which in turn influences our body, and will lead us to make lifestyle choices and changes in our environment. Consider the following case:

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## Karen

Karen was constantly teased as a child. She believes that she is unlovable and worthless (**thoughts**- created by memories of past life experiences). When she is thinking this way, she feels anxious and depressed (**mood**). When Karen feels anxious, she tends to binge-eat in an attempt to soothe herself and block out her thoughts (**behaviour**). Karen is consequently obese and has some related health problems (**physical reactions**). Karen's health and size limit her lifestyle choices. She stays home a lot (**behaviour**) and tends to gravitate towards people who confirm her beliefs about herself (**environment**). This in turn supports her negative thoughts and sets up new ones, sparking off related consequences in other areas of her life.



Can you see that Karen is trapped in a negative cycle, or downward spiral?

It is important to note that changing any one aspect of the cycle will influence all of the others. If this is a positive change, the effects will be positive. To make the changes long lasting and self-perpetuating, we can target more than one area at once. This can help reverse the negative cycle.

That is what this training program is all about- offering you more choices about strategies that you can use to help your patients improve the quality of their lives. Cognitive and behavioural therapies are designed specifically to modify unhelpful aspects of our lives.

Let's go back to Karen's case to see where you, as her GP, may make an intervention:

## Karen

You may recognise Karen's depression, and begin a course of anti depressant medication (**target: mood/ emotion**). This may reduce her anxiety as well and may reduce the frequency and amount of binge eating (**effect: physical-weight loss**). You may recommend that she lose weight and begin an exercise program (**target: behaviour**). You may even offer advice about her negative choice in relationships, or guide her to her own awareness of this (**target: environment**).

For Karen, this intervention may be just the impetus she needs to reverse the cycle and make major changes in her life.

All of us however, know a person like Karen who might make the changes temporarily, but will slip back into negative patterns, probably because of the strong and long lasting impact of her beliefs. When this happens, more specific techniques are required.

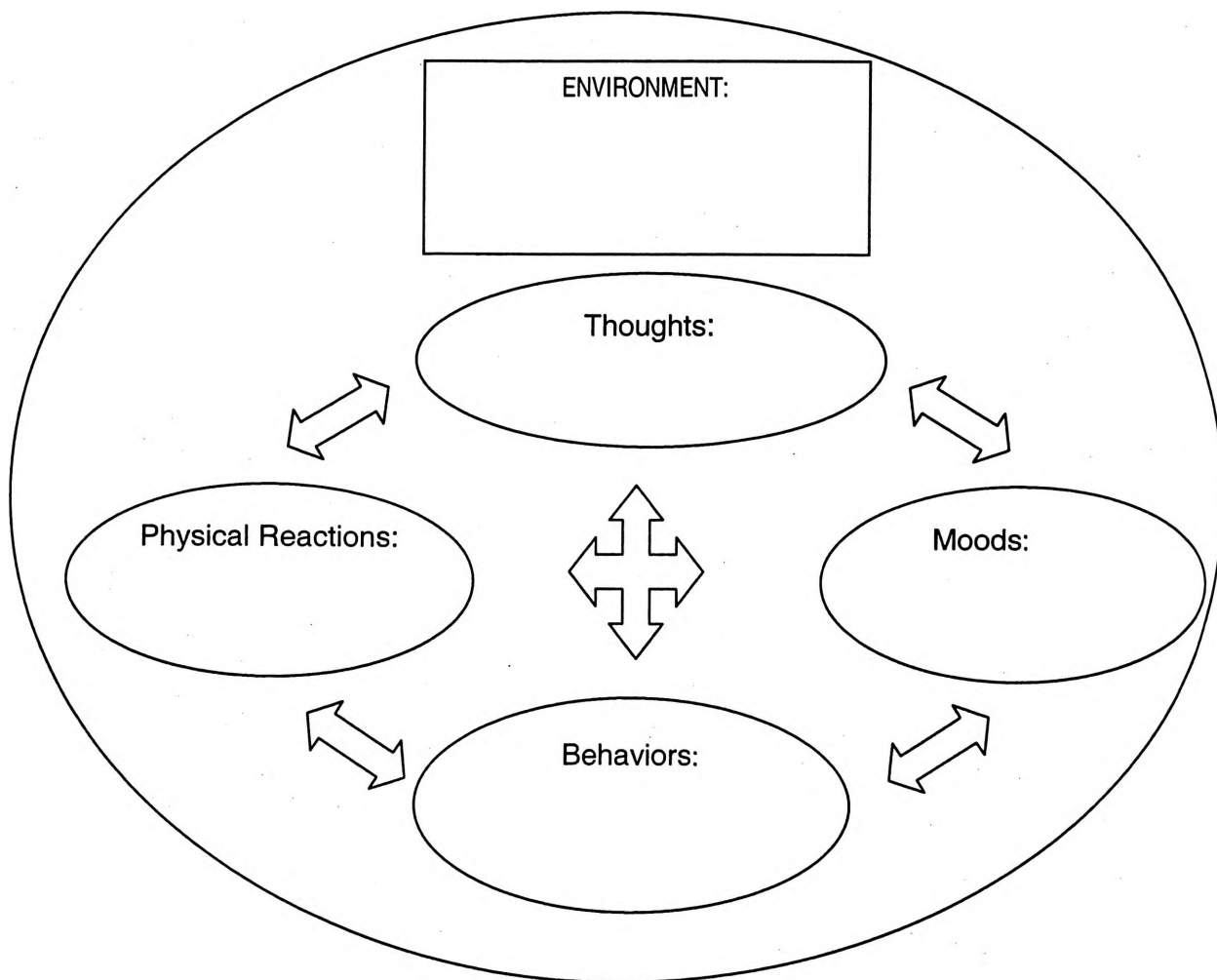
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## Case Study: Jeff



### Homework Exercise

Jeff's favourite uncle died of a brain tumor when Jeff was 15. At the time Jeff was horrified by how quickly his once active uncle deteriorated. The signs of the disease for his uncle included headaches and blurred vision. Since the death Jeff has become quite anxious when he experiences headaches, and at these times he has images of his uncle when he was in hospital during the last stages of his illness. He tends to take a lot of pain relief (paracetamol), and then scans his body for other physical symptoms. Sometimes he notices that he feels slightly dizzy at these times, and only calms down when the medication has taken effect. He's still left with a vague worry however that something might be wrong, and he's asked you as his GP to run some tests.



**Fill in the above diagram, placing Jeff's experiences into the spaces above. If his tests came back negative, think about how you might be able to use this model to explain Jeff's symptoms to him with the aim of reducing some of his anxiety.**

## So where does the rationale fit in when I have a patient in my office?

OK, so you have a patient in your office that presents with problems that you think may be related to psychological process rather than purely physical processes. You're starting to understand the rationale- when do you start explaining it to them? We suggest the following process as a guide (you might choose to use only some of these steps depending on your available time):

1. Listen carefully and demonstrate that you are listening by using active listening principles
2. If you do decide to do physical tests, and you're pretty sure they'll come back negative, you can let the patient know that is what you're expecting to set up a positive expectation
3. Tell the patient that their symptoms are not signs of disease (e.g., stroke, heart attack, cancer). Say that you believe that they are real, but they are caused by anxiety, or tension, or depression.
4. Explain the links between physical reactions, thoughts, feelings and emotions (draw the circle if you wish)
5. Conduct an assessment with the client using either the Five Aspects model, or the Before>During>After technique or the A>B>C technique (further explained in next section)
6. Encourage the patient to consider your rationale as a hypothesis, a possible explanation for their symptoms. If you are right, the treatment strategies you suggest should reduce the symptoms
7. Teach the strategies to reduce the symptoms (see next section)
8. Have the patient monitor the results to serve as behavioural evidence that it works and to reinforce their efforts

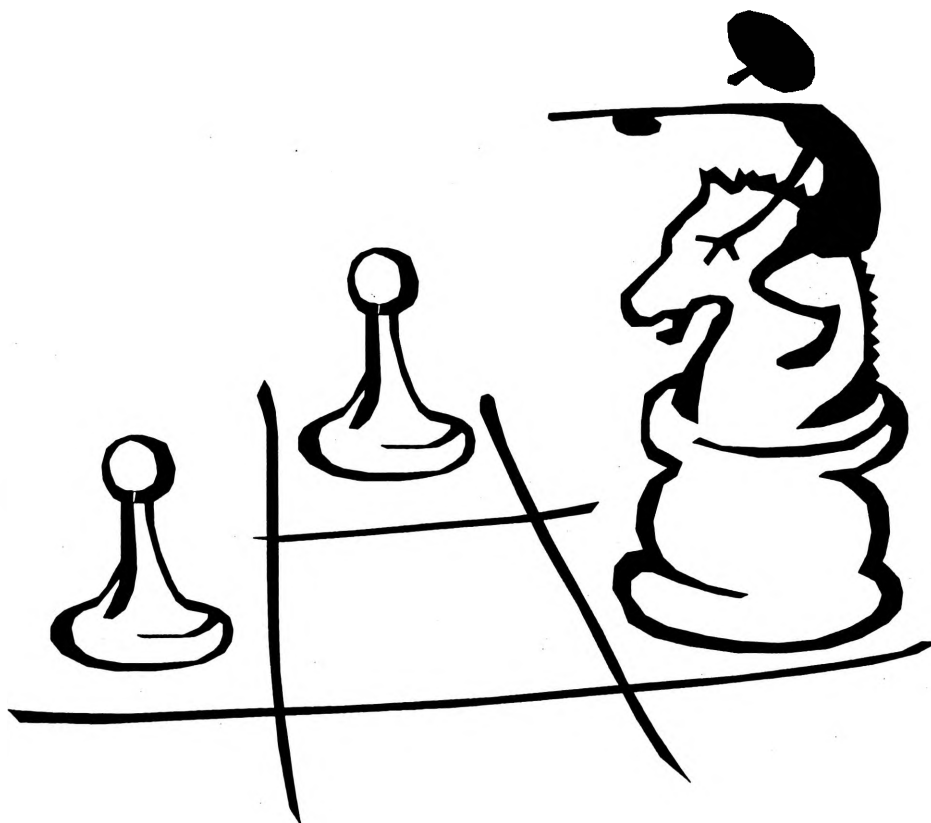
### TIP:

Very often, when your patient goes home they are asked what you said about their symptoms. Consider asking them that question before they go home to check that they understood your explanation of their symptoms. You could say, "So when your wife asks you what I said has been causing these symptoms, what will you tell her?"

### *Summary: The basic rationale:*

1. As your GP I have found no evidence of disease, but I know your symptoms are real
2. Emotional states can lead to physical complaints
3. Our thoughts and behaviours contribute to our emotions
4. We can change our thoughts and behaviours
5. Therefore we can improve many physical complaints using cognitive and behavioural techniques

# Therapy Strategies



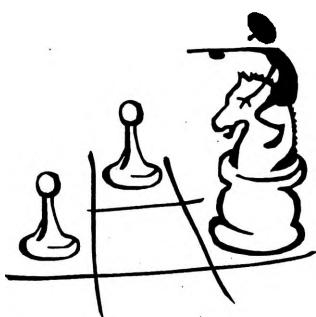
STAGE 4

*Strategies to  
Reduce Symptoms*

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# Introduction

## Aim of this Component



This component of the program instructs in a variety of therapeutic strategies to reduce negative mood states and anxiety.

Strategies to alter irrational thinking styles and reduce physiological arousal are demonstrated and practised.

## Cognitive & Behavioural Treatment Strategies

In this component of the program you will learn a series of empirically validated techniques to help reduce the symptoms that arise as a result of thinking and behaviour traps.

These strategies have evolved from experiments that show that negative emotional states can be experimentally conditioned, or learned, and then can be experimentally extinguished. It has been demonstrated that these states can also be conditioned and de-conditioned in real life. The relearning techniques discovered experimentally can be taught and applied successfully to emotional problems in real life.

Cognitive and Behavioural Therapies involve encouraging patients to see unhelpful learned responses as habits or programming gone wrong and provides techniques to reprogram responses and behaviours. Patients are encouraged to test hypotheses about their problems and to carry out experiments that help them to test their beliefs about the world and their ability to cope in it.



# Behavioural Therapy Strategies: Arousal Reduction

## Objectives

By the end of this component you will be able to:

- ◆ Describe the “Fight / Flight” Response
- ◆ List some advantages of Arousal Reduction Training
- ◆ List some problems that can be reduced using Arousal Reduction Training

## Introduction

Arousal reduction techniques are an important component of Behaviour Therapy and are used to help patients learn to reduce their levels of stress. This is especially important for patients with anxiety disorders. For these people, their arousal levels may be chronically high. Minor irritations, frustrations and stressors can increase this level of arousal to a point that feels unmanageable.

Once patients have learned to reduce their levels of arousal, their feelings of self-efficacy and ability to cope is also improved. The techniques can demonstrate to patients that situations that they may have felt were beyond their control are manageable. This can reduce negative cognitions and improve self-esteem.

The following component will provide background information and the workshop will teach the strategies themselves.

## What is Stress?

There are many definitions of stress and a full explanation of them all could take many pages. For the purposes of this program, stress will be defined as a demand or pressure on people. The term ‘stress response’ encompasses the total of the individual’s emotional and/or physiological response to the events perceived or evaluated as a threat to his or her well-being (Mendelson, 1990). This pressure or demand at optimum levels will increase performance and motivation, but if maintained at very high levels, stress will reduce performance and cause strain. Excessive arousal on a short-term basis can cause:

- ◆ Altered mood;
- ◆ Altered sleeping / eating patterns;
- ◆ Gastrointestinal disturbances;
- ◆ Headaches and muscle aches;
- ◆ Skin rashes, including psoriasis.

Prolonged excessive stress has been found to be related to a number of physical illnesses including:

- ◆ Cardiovascular disorders;
- ◆ Duodenal ulcers;
- ◆ Hypertension;
- ◆ Kidney dysfunction.

Hyperarousal is also a feature of many psychological or emotional disorders (Moore, Burrows & Dalziel, 1992).

Certain bodily changes occur when a person responds to the demands of stress and these changes form the "fight or flight response".

## The Fight or Flight Response

The Fight or Flight response is a series of physiological and psychological changes that occur when we are in danger, under threat, or in periods of perceived stress. The mechanism that triggers the response is very primitive and is governed by the Autonomic Nervous System. Some of the changes that occur within the body follow:

- ◆ The breathing rate speeds up and therefore more oxygen is taken in and made available for the muscles.
- ◆ Blood is diverted into the large muscles (arms and legs). Less blood is allocated for areas which do not immediately help the individual with the survival response.
- ◆ The heart rate and blood pressure increases.
- ◆ Muscles become tense.
- ◆ Blood clotting ability increases in order to minimise blood loss should injury occur.
- ◆ Pupils dilate to take in more light.
- ◆ Sweating increases to cool the body.
- ◆ Digestion slows as it is not essential for immediate survival.
- ◆ The mind becomes focused on escaping from danger.

The fight or flight response is triggered in response to actual threat but it is also triggered in response to perceived threat. For example, if a truck is speeding towards us, the response will be triggered, but it may also switch on when we start to think about a job interview or when we believe our performance is under appraisal. Neither of the latter situations is intrinsically dangerous and yet the response system is the same. Whether it is full-blown panic or just nervous apprehension, the autonomic nervous system and the fight or flight response control both of these responses. This is important for patients to understand as negative thoughts can trigger panic reactions just as easily as an armed intruder running towards them.

## Benefits of Arousal Reduction Training

Training in arousal reduction methods can benefit an individual in many different ways. These include the following:

1. **Attention and concentration:** Regular relaxation can help a person to think more clearly and enjoy improved concentration. In addition, relaxation training may have broader cognitive effects. For example, one study found that relaxation increases the accessibility of positive information in memory and hence makes it easier to find alternatives to unhelpful beliefs (negative-related thoughts).

By analogy, it is possible that regular practice of relaxation can in this way alter the accessibility of adaptive cognitions, and lead to attitudinal and behavioural changes.

2. It may help the person to feel calmer and more energetic.
3. It is used by trainers to help sports people focus and thus improve their coordination.
4. Some studies have shown that regular relaxation may help to reduce the risk of stress-related illnesses.
5. Relaxation can be an effective way for individuals to demonstrate to themselves that they have control over their symptoms (eg. anxiety).
6. It may help people to improve their interpersonal relationships, because people may respond more warmly to a relaxed and friendly person. A relaxed individual may be seen as having good social skills.

## The Application of Arousal Reduction Training

The various forms of relaxation training can be used to help manage a number of common psychological problems including:

**Anxiety**  
**Depression**  
**Insomnia**  
**Headaches**  
**Anger**  
**Pain**

It is important to note that arousal reduction techniques are only part of the treatment program for each of these problems.

## Anxiety

When a person is anxious, there are three different components to their reaction: a physiological component (eg. increased heart rate, sweating, muscle tension); a behavioural component (avoidance or trying to escape), and a cognitive component (negative thoughts such as "I am going to collapse" or "I cannot cope").

The relative strength of these components varies from person to person - but it is common for people to experience a physiological change, followed by a negative thought, which increases the physiological reaction, producing a vicious circle.

One effective way of breaking this vicious circle is to focus on the physiological reaction and to learn how to manage it and/or learn not to react so strongly.

One type of relaxation method that may be used is called Progressive Muscular Relaxation training. This will be taught during the workshop phase of the program. PMR seeks to reduce the autonomic arousal component of anxiety by altering one of its manifestations, namely muscle tension. As muscle tension drops, other less directly accessible aspects of autonomic arousal, such as heart rate and blood pressure, are also lowered. Another type of relaxation method that can be used to achieve this is called Applied Relaxation. The aim of this technique is to learn a skill of relaxation that can be applied very rapidly and in practically any situation.

Rapid shallow breathing may also be part of the anxiety response. As noted above, controlled breathing techniques help to counteract the rapid breathing response. The hyperventilation response will be discussed in more detail in the following component.

## Depression

Depression slows people down mentally and physically. Everything becomes an effort and they tire easily. People who are depressed do less and then may blame themselves for doing less. They may come to believe that they can do nothing and that they will never get over their depression. They then feel even more depressed. It becomes even more difficult to do anything. And so it goes on in a negative downward spiral.

Becoming more active is one way of breaking the vicious cycle. Increasing pleasant events and decreasing unpleasant events may halt the downward spiral and reduce the feelings of depression.

Learning to relax is a skill that can be used in many different situations to increase the pleasantness and/or decrease the unpleasantness of certain events.

## Insomnia

Insomnia may include one, or a combination of, the following components: a long delay in falling asleep, frequent awakenings during the night, early morning awakening, and feelings of fatigue and dissatisfaction with sleep upon awakening.

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Difficulties in falling asleep may be associated with anxiety, worry or ruminating thoughts. It may also be due to physical restlessness and general feelings of tension.

There are various relaxation methods that can be used to deal with the stress, tension, and/or anxiety that may underlie the insomnia. These include PMR, release-only relaxation and cue-controlled relaxation. Distraction and grounding techniques are also useful to stop thoughts racing around at night. Regular physical exercise several hours before bed is also very important. As regular, rhythmic stimuli are conducive to sleep, relaxation may be conducted in a very 'rhythmic way', including pleasant and rhythmic mental images.

## Headaches

Headaches have traditionally been divided into a number of groups, including migraine and tension headaches (sometimes called muscle contraction headache).

Tension headaches involves chronic elevated muscle tension of the forehead, face and neck. Any reduction of the contraction may help to reduce the headache. PMR, controlled breathing and meditation are all effective relaxation techniques and aim to reduce muscle tension.

The person who has a tension headache may also tend to have experienced emotions such as anxiety, worry, anger, loneliness and depression, in addition to unhelpful beliefs. Since relaxation training can increase feelings of calmness and reduce the intensity of these emotions, it may have an ameliorative effect on the tension headache.

Another useful type of relaxation method used is Applied Relaxation (with additional emphasis on self-monitoring at the first signs of a headache). The person is asked to identify the pre-headache state up to two hours before a headache develops, and can then use Applied Relaxation to help manage the headache. Migraine headaches may be more severe for some people and are often accompanied by blurred vision, dizziness, nausea and painful throbbing. These are believed to result from the dilation of the superficial cranial arteries which causes an increase of blood in the area. Muscle tension, especially of the back and neck, may be markedly increased resulting in additional pain.

"Mini-relaxation" of the face and shoulders can reduce chronic tension. During the full-blown occurrence of a headache, relaxation may reduce the pain-induced tension cycle. During a headache, observation of relaxed postures and breathing may divert some of the focus on discomfort, and promote a feeling of control.

## Anger

The person who is angry may notice that it manifests in different ways including: aggression, muscle tension, restlessness, increased heart rate, increased blood pressure, rapid deep breathing and sweating.

Relaxation techniques can be used to decrease the intensity of these emotions and physiological components (responses). Distraction techniques can be used to help the person break the cycle of angry thoughts and generally give them time to think rather than act with haste.

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People who are chronically angry need to become aware of their arousal levels and take steps to lower them when they notice physical changes that indicate that their anger is climbing.

Explosive physical strategies are good for people who have a chronic anger problem as they can help reduce the overall levels of adrenaline that build up in the body. Using a punching bag, climbing stairs, jogging and cycling are useful.

## Pain

A person suffering pain usually reduces the amount of exercise they do and they may adopt exaggerated postures in an attempt to moderate their pain. As a result of this behaviour, the pain (which may have originally been muscular) worsens, and the person may begin to experience pain from other muscles persistently in awkward positions. PMR has been shown to be useful in reducing such muscular discomfort.

Generalised muscle tension and inactivity are characteristic of most types of pain. Breathing irregularities, such as rapid shallow breathing and deep sighs, are common in low back and other pain conditions. Relaxation can be targeted through controlled breathing to counteract hyperventilation patterns that may arise.

Relaxation strategies in the form of distraction exercises can also help people to stop focusing on the pain, which can bring relief for limited periods. This can stop the pain cycle from escalating.

## Summary

Arousal reduction techniques are designed to switch off the flight or fight response, to calm the body down.

Arousal reduction techniques are skills that can be learned and used to lower general levels of tension.

The types of problems that can be helped with arousal reduction strategies include: anxiety, depression, insomnia, headaches, anger, chronic pain, and general stress at home and in the workplace.

# The Role of Hyperventilation in Anxiety

## Objectives

By the end of this component you will be able to:

- ◆ Briefly describe what happens during the normal breathing response
- ◆ Briefly describe what happens during hyperventilation
- ◆ Explain why people who chronically overbreathe are more prone to panic attacks
- ◆ Explain in your own words the role of hyperventilation in the anxiety cycle

## Introduction

It is normal for the breathing rate and depth to increase when we perceive we are under threat. This is a part of the normal physiological response (the Fight / Flight response) to perceived danger. However, people who are prone to panic attacks and other anxiety disorders are known to overbreathe more often than others in the general community. They may have chronically high breathing rates or breathe more deeply, more frequently than other people (Holt & Andrews, 1989).

Our aim in presenting this information to you now is to give you some background to the effects and causes of hyperventilation. In the workshop part of this program we will teach a variety of methods to prevent and manage hyperventilation.

## Definition:

The term hyperventilation describes an increase in the rate or depth of breathing that produces a higher degree of ventilation than is necessary to meet the body's demands (Andrews *et al*, 1994). Another term for hyperventilation is *overbreathing*.

## What Happens during 'Normal' Breathing?

Through normal breathing oxygen is taken into the lungs where it 'attaches to' hemoglobin in the blood. The blood circulates around the body carrying the oxygen with it for use by the body's cells.

The cells have energy reactions for which they need oxygen. The by-product of this energy reaction is carbon dioxide and this is released into the blood and it travels back to the lungs and is breathed out.

There needs to be a specific balance between oxygen and carbon dioxide for the energy reactions in the body to be regulated correctly. This balance is maintained through the correct rate and depth of breathing.

## What Happens when we Overbreathe?

Breathing too much will have the effect of decreasing the levels of carbon dioxide (alveolar and arterial carbon dioxide pressures decrease). This produces a drop in the acid content of blood which makes the blood more alkaline (blood pH rises). So when we overbreathe there is a decrease in the amount of carbon dioxide in the blood and an increase in the alkalinity of the blood. These changes in the blood are responsible for most of the physical changes that occur during hyperventilation.

These changes in the blood trigger neuronal changes and lead to a constriction, or a narrowing, of certain blood vessels around the body, for example in the blood vessels leading to the brain. In addition, the hemoglobin in the blood does not release the oxygen it picks up as effectively. Therefore less blood travels to certain areas of the body because of the tightening of blood vessels and the oxygen that is carried by this blood is less likely to be released to the tissues. What this means then, is that although more oxygen is taken in when we overbreathe, less oxygen is actually being used in certain areas of our body.

## What Does it Feel like to Hyperventilate?

Because of the slight reduction of oxygen to the brain and other parts of the body during hyperventilation a variety of symptoms may occur. These include:

- ◆ feelings of confusion
- ◆ an increase in heart rate
- ◆ breathlessness
- ◆ cold, clammy hands
- ◆ disorientation
- ◆ stiffness in the muscles
- ◆ blurred vision
- ◆ numbness and tingling in the extremities
- ◆ dizziness
- ◆ feeling hot, flushed and sweaty
- ◆ feeling 'light headed'
- ◆ feelings of tiredness or exhaustion
- ◆ feelings of unreality
- ◆ chest tightness or chest pain (due to breathing more from the chest than the diaphragm).

If overbreathing continues the body's automatic regulatory response will forcibly restrict our breathing in order to force carbon dioxide levels back to normal. These symptoms can include:

- ◆ a crushing sensation or sharp pains in the chest
- ◆ temporary parathesias
- ◆ feelings of severe vertigo - dizziness and nausea
- ◆ "blackouts" or momentary lapses in consciousness
- ◆ fear or terror (eg. that one will suffer a heart attack or will die).

REFERENCE: Andrews *et al*, 1994



## Important Points about Hyperventilation:

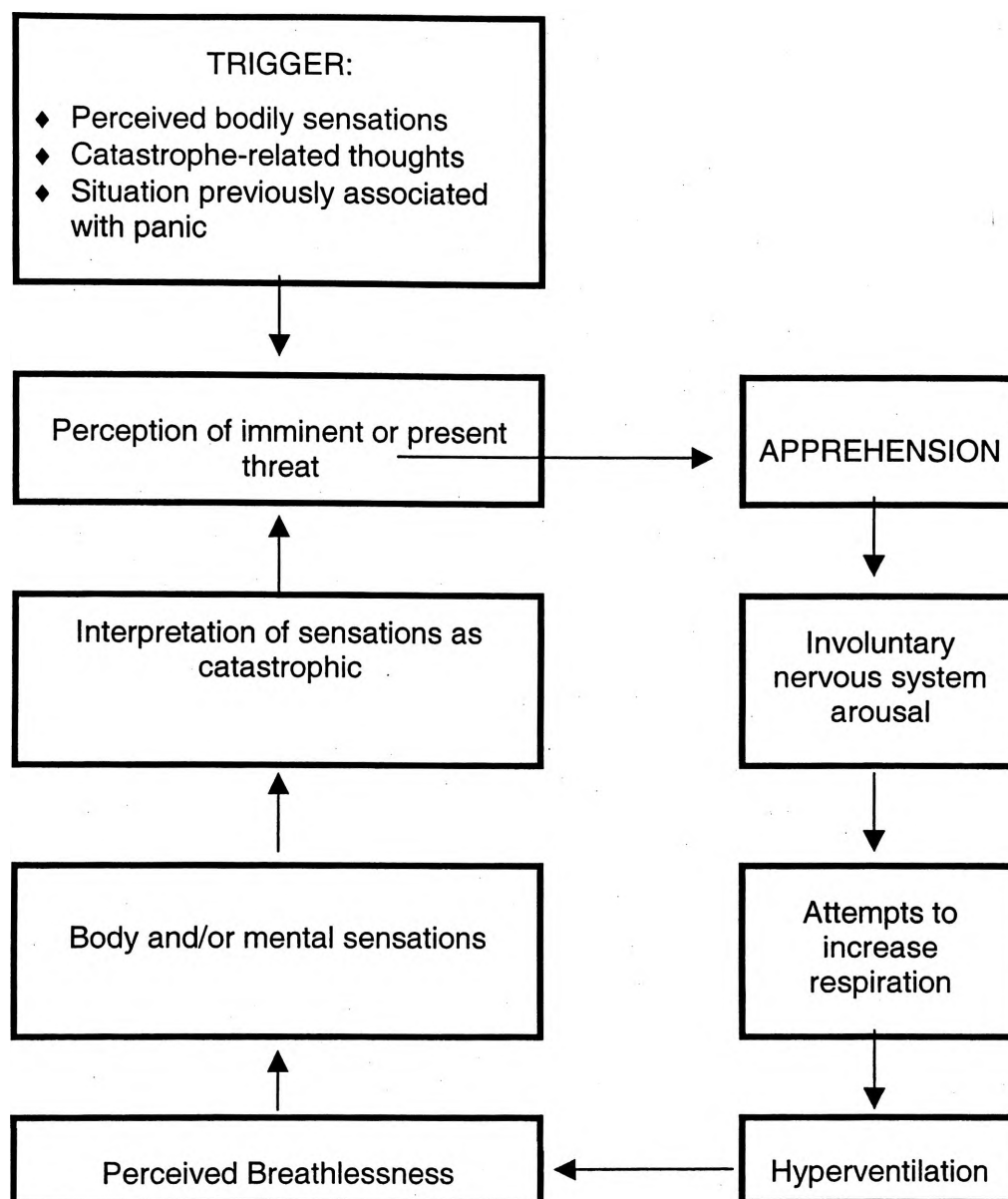
1. Hyperventilation is usually not dangerous (occasionally those who suffer asthma may suffer an asthma attack following hyperventilation; and, very rarely, in susceptible individuals, seizures may follow hyperventilation).
2. The symptoms listed above vary in different people.
3. Mild hyperventilation can leave people in a state of chronic apprehension.
4. If people tend to chronically overbreathe there is a constant reduction of carbon dioxide in the blood which may be compensated for by the body without producing symptoms. But if the breathing rate changes suddenly (eg. a sudden fright, increase in exertion or a yawn or sigh) symptoms can be triggered. This may explain why some people say their panic attacks come from nowhere.

## How is Hyperventilation Related to Panic Attacks?

Hyperventilation can lead to panic attacks, but it is not the sole cause of panic attacks. Some people have panic attacks without hyperventilating and some people hyperventilate without having panic attacks.

The symptoms of a panic attack can be produced by a variety of methods - one of which is hyperventilation. The most important other variable that contributes to panic attacks is distorted cognition, or the negative thoughts that people have about normal bodily signs and symptoms.

The following diagram represents the panic / anxiety cycle. It is a schematic representation of the cognitive and physical sequence of events that can occur during panic attacks.



The diagram depicts the panic / anxiety cycle. It demonstrates that the cycle begins as an interpretation of some event or situation as threatening. This could be a feeling in the body that one has associated with panic attacks (eg. a dry mouth, or an increased heart rate). It may also be a situation that has a negative association (eg. a place where one cannot easily escape if panic begins, like a train). Another possibility is a catastrophic thought (eg. "They're going to think I'm stupid"; "I'm going to stuff this up"; "Everything depends upon me getting this right").

This *perceived* threat leads to a feeling of apprehension or dread. This switches on the automatic 'Fight / Flight' response system that starts a series of bodily reactions (see Arousal Reduction section), including increased respiration. This may lead to hyperventilation. These normal body signs and symptoms are interpreted as being catastrophic (eg. "I'm having a heart attack; "I'm losing

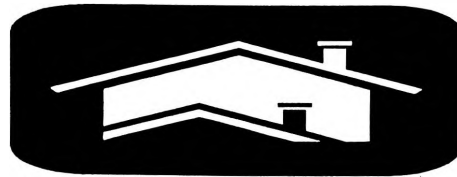
control”; “I’m going mad”; “I’m going to collapse and make a fool of myself”). This of course feels threatening and the body responds to perceived threat in its normal manner - the ‘Fight / Flight’ system steps up - and the cycle escalates.

## Summary

It is normal for our breathing rate to escalate when we are under threat. This is part of the ‘Fight Flight’ response system. This system doesn’t know the difference between *actual* and *perceived* threat. It will switch on when we just think there is threat.

There are a series of psychological and physical changes that happen when we overbreathe and the body will automatically slow the breathing rate if we take in too much air. This can feel as though we can’t breathe and can lead people to think they are going to die. Hyperventilation however is not dangerous. Cognitions play an important part in the panic / anxiety cycle.

Did you understand the previous component? To test your knowledge of this topic you may choose to write your answers to the following questions in the spaces provided.



Homework Exercise

1. Briefly describe what happens during normal breathing.
  
  
  
  
  
  
  
  
  
  
2. Briefly describe the physiological process of hyperventilation.
  
  
  
  
  
  
  
  
  
  
3. Why are people who chronically overbreathe are more prone to panic attacks?
  
  
  
  
  
  
  
  
  
  
4. Explain in your own words the role of hyperventilation in the anxiety cycle.

## Arousal Reduction: Controlled Breathing Techniques

Controlled breathing techniques are used to slow the respiration rate. This is useful because of the effect that breathing has upon heart rate, blood pressure and upon the rest of the body generally. Breathing correctly slows the bodily processes, lowers arousal, and in turn reduces tension or stress. Slowing the breathing rate is an effective method to turn the "fight / flight" response off.

During the "fight / flight" response the breathing rate increases. This can lead to hyperventilation and may contribute to panic attacks and Panic Disorder in some people. Overbreathing causes an imbalance between oxygen and carbon dioxide which decreases the oxygen reaching the body and brain (Page, 1993).

**To redress the balance quickly between oxygen and carbon dioxide when a person is hyperventilating, have them breathe into a paper bag, cup their hands over their mouth and breathe into them, or put their mouths under their jumper / shirt and breathe. These methods work quite quickly.**

Simply encouraging your patient to learn to breathe through their nose and to consciously try to reduce the number of yawns and sighs that they take can help reduce their respiration rate. People who breathe through their mouths are more prone to hyperventilation because of the large amounts of air they are constantly taking in. Frequent sighing and yawning also mean that large amounts of oxygen are being taken in and the respiration rate is always high.

Slow-Breathing Techniques should be done at the first signs of anxiety or panic. For people who tend to overbreathe or suffer panic attacks, they should be used before tackling difficult situations and any time when they are feeling tense or anxious. The more they are practised, the more proficient one becomes at using them.

Generally you should practise a range of these exercises with your patients before they leave your office. See the process of practice as a chance for you and your patient to collaboratively experiment to determine which exercise they find helps them the most. A range of these exercises will be presented in the workshop.

Behaviour therapy usually involves homework. The rationale for this is that unhelpful behaviours that have been learned over time (like overbreathing) need to be 'unlearned' and more helpful behaviours need to become the habit to replace them. You will find patient instruction sheets and 'homework' monitoring forms at the end of the Behaviour Therapy section. Monitoring forms also physically demonstrate to your patient that the procedures they are practicing actually work.

# Arousal Reduction: Grounding and Distraction Techniques

## Introduction

Grounding and distraction techniques are useful Arousal Reduction strategies for people who are anxious, depressed or angry. These techniques help to stop the cycle of negative automatic thoughts that usually accompany these emotional states. These negative thoughts can go around and around and serve to escalate the upsetting emotional state. The person can then become more and more angry, anxious or depressed. Moreover these thoughts will often intrude when one is trying to sleep, sometimes delaying sleep for hours. Adding sleep deprivation to these emotional states serves to compound the problem.

Grounding techniques are especially useful for helping to turn the 'Fight / Flight' system off. When very anxious or angry we may be scanning the environment for sources of threat without really realising it. Our bodies can become keyed up for action and our stress levels can be so high that we are not aware of even being inside our bodies. Grounding techniques work by having the person focus upon the physical sensations in and around their bodies. The person starts to really become aware that there is nothing threatening them, that they are safe and that they can let themselves relax. These can be useful techniques to use before sleep.

This program will introduce the following techniques:

- **Isometric Exercises:** Quick, simple and effective tension / release exercises that can be done anywhere. The advantages of Isometrics are that they reduce muscle tension, combine a slow breathing exercise to reduce the respiration rate, and they distract thoughts as well.
- **Self-Safe Hypnosis:** A very effective grounding technique that can be used even when a person is extremely aroused, eg. leading up to a panic attack, or when extremely angry. SSH distracts thoughts very effectively and helps the individual become more aware of their body, usually inducing a calming, even hypnotic sensation, hence the name.
- **Simple tips for Distraction:** Some basic suggestions for distracting the thoughts when in situations that you can't control. Waiting in queues or traffic are two anxiety-provoking situations for some people. Dwelling upon the negative aspects of the situation makes them feel worse. These techniques help draw attention to harmless, incidental or even humorous details. It's hard to panic when you're laughing!

# Arousal Reduction: Progressive Muscular Relaxation

Progressive Muscular Relaxation (PMR) training is an integral component of the Cognitive Behavioural treatment of:

- Panic attacks (Panic Disorder)
- Anxiety Disorders generally (e.g., Agoraphobia, simple phobias, etc.)
- Depression
- Burnout
- Sleep Disorders
- Post Traumatic Stress Disorder
- Sexual Dysfunction

Studies have been conducted that demonstrate that PMR, practiced regularly, can also significantly lower blood pressure. It can therefore also be useful for hypertensive patients.

Progressive Muscular Relaxation scripts have been developed by a variety of different people (e.g., Bernstein & Borkovec, 1973, Ost, 1987). The Ost (1987) model will be presented below. The following principles are important with regards to all forms of PMR:

- PMR is a learned skill. It is only acquired with practice and the more frequently it is practiced the more effective it is.
- The aim of the technique is to use it not only while at home in an armchair but also while doing everyday activities.
- The skill should be demonstrated during a treatment session rather than just giving tapes of the procedure, as studies indicate that audio-tapes alone are rarely effective.

PMR involves tensing and relaxing a series of different muscle groups i.e. hands, arms, face, neck, shoulders, back, chest, stomach, hips, legs, and feet. PMR takes approximately 15-20 minutes.

By alternating between tension and relaxation, individuals are taught:

- (i) to discriminate between the two states of tension and relaxation; and,
- (ii) to become more aware of the parts of the body that are particularly tense.

PMR also involves focusing in on breathing. Indeed, before starting training in PMR it is important to teach techniques to control breathing so that breathing is done at a regular and comfortable pace throughout the procedure.

In order to facilitate the transition to natural situations, the person is asked to sit in a comfortable chair, whilst learning PMR.

In a therapy session, initially, the therapist models how the different groups of muscles are to be tensed and relaxed. The person does the various tension-release exercises at the same time, with the therapist checking that these are done correctly. This is done before the procedure actually begins.

Typically, the person then closes their eyes and the therapist takes them through tensing and relaxing the different muscle groups.

Tension is normally maintained for about 5 seconds, with the subsequent relaxation of a muscle group lasting 10-15 seconds.

Prior to the session, each person is asked to rate how tense they are, using a 0-10 scale (where 0 = no tension at all and 10 = extremely tense). After the relaxation session, the person is asked to re-rate their degree of tension again using a 0 - 10 scale (where 0 = no tension at all and 10 = extremely tense). The same rating scale is also used for the person to monitor their own progress in-between sessions.

The idea of monitoring tension levels is to give the person an idea of how he/she is progressing in relaxation and that relaxation helps to decrease their tension levels, even if it is only marginally.

## Possible Problems

Some people have difficulty with relaxation techniques when they first practice them. Occasionally, people actually become more anxious when they first try PMR. This is known as relaxation-induced anxiety. This may occur for several reasons:

- Some people fear loss of control when they 'let go' of their tense muscles during the procedure.
- Other people will find that focusing on their body leads them to negatively misinterpret normal body sensations as indicative of something sinister.
- Some people find that their minds wander from thought to thought and topic to topic and they find this disturbing. It can be useful to reframe this experience as a relaxation of the 'fight/flight system, allowing thoughts to become less focused (Andrews *et al*, 1994).
- Some people feel disoriented and this can give rise to a feeling of panic. Closing the eyes and relaxing can sometimes cause a floating feeling, as if one is in space. Some people at first find this feeling aversive.
- Very occasionally a particularly negative reaction will occur in a person who may have a "flashback" experience while relaxing. If this occurs, the procedure can be discontinued until the patient has been grounded and reassured.



## Suggested Solutions For Possible Problems

Negative reactions to relaxation training can be reduced by warning patients before beginning that they may experience unusual sensations when they first start but that these are perfectly harmless and that if they do occur they should try just to observe them and continue with the procedure. Allowing the patient to leave their eyes open if they choose to may help. Have them focus on a point in space: the wall, or a patch of carpet on the floor. Gradually their eyes will start to un-focus and may begin to close.

### Muscle cramps

The occurrence of muscle cramps during relaxation training is very disruptive. Cramps occur most frequently in the calves and feet. Cramps can be avoided by asking the person to generate less tension in these particular problem areas for a shorter period of time (no longer than 5 seconds for the feet).

For areas of the body in which the person experiences frequent cramping, alternate tension strategies may be employed, along with shorter tension periods.

### Mind wandering or anxiety-producing thoughts

It is natural if the person notices that their mind is wandering and that they are thinking about something else beside relaxing.

Everyone's mind wanders sometimes, and this may also happen when the person is actually relaxed. If the person finds that their mind is wandering during relaxation, ask them to bring their attention back to their breathing, or to the sound of your voice. It may be useful to repeat the word 'relax' each time they breathe out - in order to regain focus on relaxation.

During relaxation the person may experience the presence of distracting, intrusive thoughts, and/or may become anxious as a result of the various thoughts.

The person who has trouble with anxiety-producing intrusive thoughts may be provided with some pleasant scenes to visualise. These scenes may be integrated into the relaxation procedure and act to facilitate it.

### Sleep

One of the most common problems which can arise in the course of progressive relaxation training is having the person fall asleep during a session - but this is to be avoided if the relaxation skills are to be learned efficiently.

A person who reports falling asleep regularly when practicing on their own, is encouraged to attempt to remain awake until the entire procedure has been completed.

### "Internal arousal"

A person may report that at the end of a relaxation training session, they have no tension in their muscle groups, but they feel 'tight' or tense inside. They may feel tense or even anxious internally while experiencing deep relaxation peripherally (the external surface, or outside, of the body).

The internal tension involves muscles which are not under voluntary control unlike the muscles targeted in PMR. The voluntary and involuntary systems are interrelated however, so that with practice, a more relaxed state of the peripheral muscles will eventually produce relaxation on the internal level.

As the person's ability to relax voluntary muscles increases, heart rate, respiration and other internal processes, calm down in a similar manner.

## What Do You Require To Practise Relaxation?

1. A place free from sudden sounds and interruptions. When practising relaxation it is a good idea to choose a place and time where you will be comfortable and unlikely to be interrupted. For example, it is a good idea to take the phone off the hook.
2. Suitable time. Try to slot in relaxation training at a regular time to allow it to become a habit.
3. A position in which you will be comfortable.
4. A mental focus to occupy your mind and thus keep out unwanted thoughts.
5. Willingness to practise. It is important that relaxation be practiced in order to be able to achieve the benefits from it. Try to practice at least once daily, and if possible twice daily.

*The skill of relaxation training can be compared to learning any other skill, for example, learning to swim or ride a bike, in that it takes time and continual regular practice.*

## Progressive Muscular Relaxation Script

### SESSION ONE

Explain PMR rationale. Demonstrate to patient the muscle groups you will be tensing and releasing and ensure they understand. If any pain is experienced, tell them not to tense that muscle group. Ask patient to get into a comfortable position. Tell them they can close their eyes if they want to. Take your phone off the hook. This should take around 15 to 20 minutes.

The following (or a variation) should be said in a slow, relaxed and gentle tone of voice.

*Start by becoming aware of the sensations at the tip of your nose... Try to breathe through your nose and start to become aware of your breathing... Try to slow your breathing down as much as you comfortably can... Imagine you can see the air going in past your nostrils... Slow it down as it enters your nose... Deep, calm and even breathing... When you breathe out, think the word "RELAX"...*

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Now focus your attention upon your right hand... Put some tension into your right hand and fist by clenching your right hand... Notice what the tension feels like in your fingers, knuckles and hand... Now very slowly start to open the fingers of right hand and let the tension go... Notice the changes that happen... Notice the difference between tension and relaxation... Allow your right hand to become heavier and heavier, warmer and warmer and more and more relaxed.

Now focus upon your breathing... Take deep and calm and even breaths... Slowing your breathing down as much as you comfortably can.

Now focus your attention upon your left hand... Put some tension into your left hand and fist by clenching it... Notice what the tension feels like in your fingers, knuckles and hand... Now very slowly start to open the fingers of left hand and let the tension go... Notice the changes that happen... Notice the difference between tension and relaxation... Allow your left hand to become heavier and heavier, warmer and warmer and more and more relaxed.

Now focus again upon the tip of your nose... Take deep and calm and even breaths... Slowing your breathing down as much as you comfortably can.

Start to focus your attention now on your right arm... Put some tension into your right arm by pressing it down into the side of the chair... Notice the tension in your forearm and upper arm... Notice what the tension feels like... Now notice as you start to let the tension go... Notice the changes... Notice the difference between tension and relaxation... Allow your right arm to become heavier and heavier, warmer and warmer and more and more relaxed.

Focusing again upon your breathing... Take deep and calm and even breaths... Slowing your breathing down... and when you breathe out, think the word "RELAX"...

Start to focus your attention now upon your left arm... Put some tension into your left arm by pressing it down onto the side of the chair... Notice the tension in your forearm and upper arm... Notice what the tension feels like... Now notice as you start to let the tension go... Notice the changes... Notice the difference between tension and relaxation... Allow the tension to drain away from your left arm and notice the sensations of relaxation.

Now put some tension into your shoulders by shrugging them up towards your ears... Notice the tension in your shoulders and around your neck... Notice what the tension feels like... Now notice as you start to let the tension go... Feel the tension dissolving away... Allow your shoulders to drop... Feel them becoming heavier and heavier, warmer and warmer and more and more relaxed... When you think that all of the tension has left your shoulders, deliberately let a little bit more go...

Now focus again upon your breathing... Take deep and calm and even breaths... Slowing your breathing down as much as you comfortably can.

Now we'll start to focus upon the muscles in your face... Put some tension now into the muscles of your face by screwing your eyes shut, clenching your jaw and pursing your lips... Feel the tension in your face... Now notice as you start to let it go... Feel your forehead smoothing out... Allow the muscles in your jaw to start relaxing... Feel the muscles of your cheeks relaxing... Let your lips relax... 264

*Let your tongue relax... Let your eyebrows smooth out... Feel all the muscles of your face becoming heavier and heavier and more and more relaxed...*

*Once again start to pay attention to the sensations at the tip of your nose... Imagine you can see the air going in past your nostrils... Slow it down as it enters your nose... Deep, calm and even breathing...*

*Now put some tension into the muscles of your neck by pressing your head into the back of your chair. If this is not possible because the chair won't allow this, try, Push your chin down towards your chest. \*Tell the patient not to do this exercise if they experience any pain. Notice the feelings of tension... Notice where they are and what they feel like... Now notice as you slowly return your neck to its normal position... Notice the tension easing away... Dissolving away... And notice the feelings of relaxation...*

*This time we're going to put some tension into the chest by taking a deep breath and holding it for 5 seconds... OK take a deep breath in and hold it for 5- 4- 3... Notice the tension in your ribs and chest...2- 1... Now as you exhale slowly notice the tension leaving your chest... Feel the difference between tension and relaxation*

*And now back to normal breathing... Deep and slow and even breathing... Thinking the word "RELAX" as you breathe out...*

*Putting some tension in to the muscles of your stomach now... Pull your stomach muscles in... Imagine that you are pulling your belly-button in towards your spine... And notice the tension around your hips and pelvis... Now notice as you*

*start to let the tension go... Notice the changes... Notice the difference between tension and relaxation... Allow the tension to drain away from your stomach and notice the sensations of relaxation...*

*Now focus again upon your breathing... Take deep and calm and even breaths... Slowing your breathing down as much as you comfortably can.*

*Now put some tension into your thighs by clenching them tightly...or you can put tension into your thighs by slightly raising them off the chair... Notice the tension in the big muscles of your thighs... Notice what it feels like... And now notice as you start to let it go... Notice the changes... Feel the difference between tension and relaxation... Allow your thighs to become heavier and heavier, warmer and warmer and more and more relaxed...*

*And now put some tension into your calves... You can either clench your calf muscles like big fists...OR Point your toes up to put tension into your calves... Notice what the tension feels like... And now notice as you start to let it go... Notice the changes... Feel the difference between tension and relaxation... Allow the muscles of your calves to become heavier and heavier, warmer and warmer and more and more relaxed...*

*And once again start to pay attention to the sensations at the tip of your nose... Imagine you can see the air going in past your nostrils... Slow it down as it enters your nose... Deep, calm and even breathing... Thinking the word "RELAX" as you breathe out...*

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*Putting some tension now into the muscles of your feet. Clench your toes in your shoes... Press your heels to the floor... Feel the tension... Focus upon it... Now slowly let it go... Feel the tension leaving your feet... Notice the sensations of relaxation...*

*OK now just scan your body for any tension... Wherever you notice it- just focus upon it and then let it go... Allow the sensations of relaxation to spread through your whole body... Allow your body to become even heavier... Even warmer. And further and further relaxed...*

*Now I'm going to count up to 10... When I get to 5, you can open your eyes and look around the room... When I get to 10 stretch if you want to but continue to feel this heavy sense of relaxation...*

Make sure at the end of the session you ask the patient for their reaction. Ask them to rate their tension before they started using the following scale: 10 out of 10 on the scale means being as tense as you possibly can be- "Like a block of concrete". 0 out of 10 on the scale means being as relaxed as you possibly can be- "Like a jellyfish". Then ask them to rate their tension levels when they finished PMR.

You can either ask the patient to practice this at home from memory- give them a monitoring form, or you can have a tape made of the session and give this to them. You will find monitoring forms at the end of this section.

## Release-Only Relaxation

- The aim of the 'release-only' method is to further reduce the time it takes for the person to relax (from 15-20 minutes) to 5-7 minutes by omitting tension.
- The therapist starts the session with the person being asked to breathe calmly and to relax as much as possible while doing so. The therapist then instructs the person to relax the muscle groups directly, starting at the hands and working right up through the head and down to the toes.
- This procedure is useful for patients in pain as they don't need to put any tension into their body.
- During this procedure, if the person experiences particular tension in a muscle group, you can ask them first to tense that group briefly and then relax it.

## Rapid Relaxation

- In rapid relaxation, the aim is: (i) further to reduce the time it takes to relax (20-30 seconds), and (ii) to give the person extensive practice relaxing in natural, non-stressful situations.
- It is a good idea that the person identify a series of cues which can be used as a reminder to relax in the natural environment. For example, every time a person looks at their watch, is about to make a telephone call, opens a cupboard, goes into the bathroom, etc.
- People often find it helpful to use a readily visible reminder to practice relaxation. To increase the signal-value of these cues (to increase the distinctiveness of these cues), it is often useful to put a sticker on the agreed cue, for example: watch, telephone, etc.
- The person should aim to relax 15-20 times a day in natural, non-stressful situations.
- When relaxing, the person is instructed to:
  - (1) take 1-3 breaths, slowly exhaling after each breath;
  - (2) think "RELAX" each time before each exhalation;
  - (3) scan the body for tension and try to relax as much as possible in the situation at hand.

# Cognitive Therapy Strategies

## Introduction

We learned in the Cognitive Assessment section that thoughts and beliefs can have a profound influence upon our feelings and behaviours. Depression, anger control problems, psychosomatic complaints and all of the anxiety disorders are typified by irrational thinking patterns. Cognitive therapy has been shown to be very effective with all of these presentations.

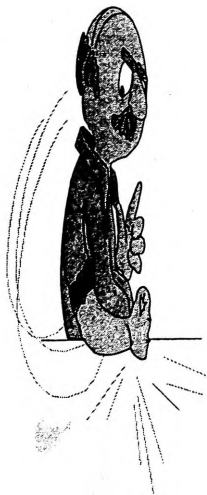
This section will present some strategies to ensure your patients are aware of their thinking patterns, will help them to determine whether they are reality-based and will help them to restructure those that are not.

As you read through this section remember that the following thought is *not* reality-based:

*"I have to understand everything in this section before I get to the workshop, and if I don't everyone is going to think I'm stupid!"*

All of the strategies will be explained, described and practiced during the workshop.

## Awareness of Thinking Styles



Thoughts are impulses that may be irrational or distorted. Habitual invalid and unhelpful thinking produces a thinking style that is:

- ❖ Automatic
- ❖ Distorted
- ❖ Rigid

By becoming gradually aware of the influence of thinking on behaviour and emotion, triggers to unhelpful automatic responses can be identified. These triggers can be used to initiate alternative responses that inhibit bad habits and bring responses under more conscious control. Cognitive strategies include:

- I. Evidence-based reality testing
- II. Neutral interpretation of events
- III. The use of neutral or encouraging self-talk.

## I. Evidence-Based Reality Testing

Cognitive therapy actively encourages the treatment of thoughts as hypotheses to be tested in the real world. Automatic thoughts are typically not based in concrete fact or recent evidence; learning to question assumptions and to seek real proof is a (cognitive) skill that needs practice.

The following questions are very important in cognitive therapy.

### ☐ What is the evidence for what I think?

Evidence FOR?

Evidence AGAINST?

_____	_____
_____	_____
_____	_____
_____	_____

### ☐ What are the alternatives? Are there any other possible explanations?

The ability to generate alternatives creates flexibility and encourages the development of empathy by considering other opinions and beliefs, training a more balanced viewpoint. Generating alternatives - and evaluating them - actively inhibits unhelpful or invalid thinking habits. **Questions are central to cognitive strategies.**

## II. Neutral Interpretation

Remember from the assessment section that interpretations about what happens in the world can be:

- ♦ positive,
- ♦ negative, or
- ♦ neutral.

*Remember the coffee cup example...*



Positive Interpretation: "Half full"

Negative Interpretation: "Half empty"

Neutral Interpretation: "Half a cup"

It is important to explain to your patients that what happens in reality just IS, how we interpret it depends upon our current mood state, our prior learning experiences and our automatic self-talk.

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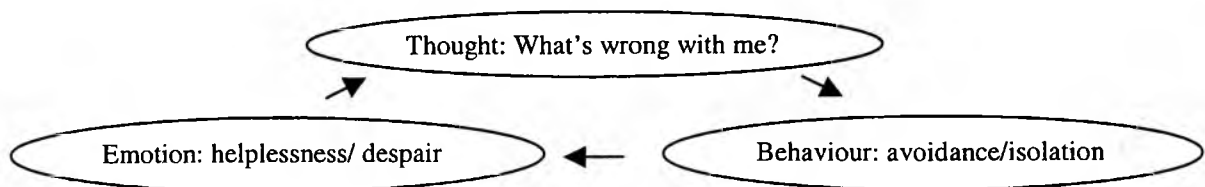
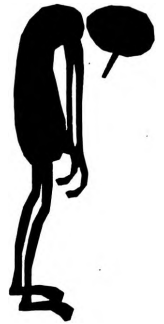


## Effect of Negative Self-Talk

### ❑ What is the effect of thinking this way?

When considering whether or not we need to change our thinking habits, we need to ask ourselves whether the thought is useful or helpful, or whether it is destructive and lowers our self-confidence and mood. If there is little evidence to support the thoughts, there are alternative explanations (see the first two questions above) and the thought is unhelpful- it gives a good incentive to challenge it.

The role of negative self-statements in the development and maintenance of psychopathology is well researched (see reference list). Beck (eg. 1979) held that clinical depression is underpinned by a set of negative worldviews (or belief structures) in which: [i.] the world [ii.] the self and [iii.] the future are seen in an automatic and inflexibly negative light. Negative self-statements and distorted thinking styles develop and maintain mood disorders (see eg. Tanner and Ball 1991) as represented below:



Negative self-talk also maintains many anxiety states:

*Example:* Jane is socially anxious and is overwhelmed at work when asked to speak during staff meetings.

A Actual event, reality	B Beliefs, self-talk	C Consequences, response
Jane is asked to present her project at a staff meeting.	"I just know I'll mess it up." "I'll blush and shake, they'll all think I'm such a fool."	Feels overwhelmed by anxiety and calls in sick on the day of the meeting.

It is often the case that invalid and unhelpful thoughts are maintained by their association with emotions, which produce sensations mistaken for evidence. For instance Jane might think that the anxiety that she feels proves that she is "a fool" and that she is incapable of presenting in public. It doesn't- all it proves is that she's anxious and that the sensations she is experiencing are the normal response to anxiety. If she believes that she will mess up during the meeting and that everyone will think she's a fool, of course she'll feel anxious, but are her assumptions necessarily correct? Awareness of the interaction between behaviour, sensation and thought processes helps people to realise that negative thinking can create the very sensations they are trying to avoid.

## Rational Thinking

A rational thinking style is Cognitive Therapy's therapeutic aim, it requires a more conscious collection and integration of information and experience. Rational thinking requires:

- The active examination of one's own responses.
- An understanding of the link between thought and response.
- The use of subjective experience for challenging thoughts and thinking styles.

*Example:* Consider a relationship in which there is increasing arguments:

	Negative thinking style	Rational thinking style
Thought	"We don't get on any more. They don't love me any more and will leave me soon. I will never cope."	"We used to get on so well, there is no reason why we still can't. I really want stay in this relationship".
Emotion	Depression, desperation, panic and anxiety.	Some concern, but hopeful and motivated.
Behavior	More arguments, increasing tension.	Initiates conflict resolution.

## III. The Use of Neutral or Encouraging Self-Talk

### Maintaining Attention

It is important for us to notice things we are doing well and to pay attention to our achievements (past and present). We need to encourage our patients to notice the occasions when they have completed difficult tasks. Consider the third year university student who states "I always stuff up my exams"- can this possibly be true if they're in third year at uni? What are they failing to attend to? What are they concentrating on?

### Maintaining Motivation

An effort should be made during self-talk to use task-centered comments enabling completion and motivational self-statements that help maintain on-task behaviour; for example: "keep going, you're almost there" or "great effort so far", as opposed to "this is so boring" or "I've been doing this forever".

### Enhancing Self-esteem

Positive self-talk incorporates acknowledgment of one's own achievement and effort; and acceptance of compliments and criticism (of ourselves and others).

*Examples.* Note the different thinking styles in each of the examples below. Consider how each might impact on the individual's behaviour and emotion.

Reality	
It's one week away from opening night, Jamie is playing the lead role in a Broadway production.	
<b>Negative Thinking</b>  "How can I possibly go out there in front of all those people? The Critics are always there on opening night and I'll be too nervous to perform my best."	<b>Neutral Thinking</b>  "I've been rehearsing for months. I can expect to be nervous on the night. But I'll need a little pep for stamina and as long as I keep focused and don't panic, I'll be fine."

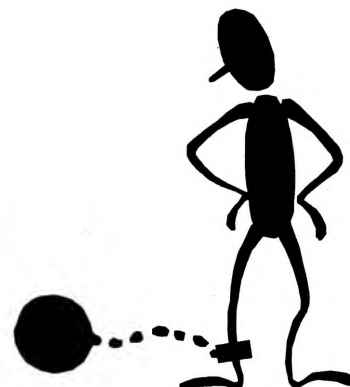
Reality	
Whilst at the movies with a friend, Brett bumps into a group of his mates. He turns to introduce his friend to them, and goes blank. For that split second, he'd completely forgotten his friend's name.	
<b>Negative Thinking</b>  "What an absolute fool I am! How could I be so stupid? I've known this guy for years, we even went to the same school. Fool! He must think I'm no friend at all.."	<b>Neutral Thinking</b>  "I've gone completely blank. I've been caught unaware and have gone to introduce my friend on impulse before I'd really thought it through."

The most important thing to note is that the neutral thinking style just states the facts whereas the negative thinking style has a large emotive content and loads of ANTs.

## Cautionary Note: 'Wishful' Thinking

Irrationally positive thinking (eg. "Nothing bad will ever happen" or "People who love each other never disagree") can be just as invalid and unhelpful as automatic negative self-talk statements [like: "My whole life is ruined" or "I just know I'll make a big fool of myself"].

An interviewee will not be helping themselves by thinking "This'll be so easy. No way can I mess up!", this sets up false and unrealistic expectations that may lead to a sense of failure or hopelessness when not realized. A more realistic interviewee would say: "I may get nervous in there, but I'm prepared and I'll try and do my best".



Consider the following excerpts from completed monitoring forms and underline the key words and phrases which show 'negative' thinking in the self-talk. Refer to the list of thinking habits in this manual



Homework Exercise

AIM: to identify unhelpful and invalid thinking styles.

Date & Time	A Actual Event  What happened?	B Beliefs  What were you thinking?	C Consequences  How did you feel? What did you do?
Tues 7:00am	Discover that the milk for breakfast has gone sour.	I am such a jinx No-one in this house buys milk. It's going to be one of those days, I can tell!  This fridge is broken. This is a bad week.	Emotion Miserable 8/10  Behaviour Sulk, leave for work without any breakfast.
Fri 10:00 am	My proposal is accepted by the Board at their AGM.	I've worked so hard on this proposal; it's taken most of my spare time.  This may mean a lot more work over the next few months.  I can hardly wait until my partner hears about this!	Emotion Happy 9/10  Behaviour Grin widely and acknowledge the feedback.
Sun 11:00	Sleeping in after a late night, suddenly awoken by the Church bells ringing across the street.	How dare they do this to me? Those bloody bells never stop ringing!  I should never sleep in. this will always happen.  The Church never considers the community.  God is punishing me for going out last night	Emotion Anger 9/10  Behaviour Turn music on and play it really loud.

# A Practitioner's Guide to Breaking Unhelpful Thinking Habits

Listed below are a series of unhelpful thinking styles (or cognitive distortions). A description, and examples, of each of these thinking habits follows. Each is then followed by a Cognitive Strategy; intended as guides to challenging. This can be a useful resource when 'shifting' beliefs that maintain habit and automatic response.

## Black & White Thinking

Experiences are viewed at one extreme or the other, rather than by various degrees, in an all-or-nothing fashion. Everything is perceived as dichotomous, for example, "success / failure", "terrific / terrible", "good / evil", "100% / 0%".

### *Cognitive Strategy*

Acknowledge specific difficulties that exist, remove all generalised statements.  
Therapy aim = Think in shades of grey.

## Jumping to Negative Conclusions

Drawing a negative conclusion from a situation in which there is no - or little - evidence to support it. Ignoring conflicting evidence (note: selective attention).  
Eg. "This is the second time that person has interrupted me. He thinks I'm boring, I should be quiet."

### *Cognitive Strategy*

Gather **evidence** and look for other alternatives. Assume positive interpretations if insufficient evidence. Remember your attention is selective.

## Over-Generalising

Eg. believing that because things have gone wrong in the past, they will continue to go wrong; "Love breaks your heart, never trust the one you love not to hurt you."

### *Cognitive Strategy*

Be specific and keep to the **facts**. Try to see it from another point of view.  
Think how it will affect you weeks from now? Or months from now? ...years?

## Catastrophising

Turning situations into life or death issues. Focusing on the WHAT IF's! A headache is interpreted as a brain tumor, "What if it really is cancer?"

### *Cognitive Strategy*

Focus on the difference between what is **possible** and what is **probable**.  
How likely is it? [note: possible = .001% chance; probable = 50% or more.]

## Mistaking Feelings for Facts

Confusing feelings with reality: "Because I feel so unattractive, I am ugly",  
"Because I feel hopeless, I am hopeless".

### *Cognitive Strategy*

Therapy aim = Become more objective.  
Rely on facts not feelings; feeling so does not necessarily make it so.

## Converting Positives into Negatives

Not giving yourself credit for your talents or achievements; eg. dismissing praise or refusing to accept compliments, "Yes, but ...".

### *Cognitive Strategy*

Acknowledge what you do and if something goes well, give yourself credit.  
Learn to stop criticising yourself.

## Crystal Balling and Absolutes

Predicting the worst possibility and then believing it as fact. Thinking in absolutes.  
Eg. "I won't ... (be able to do it)", "I can't ... (get out of bed)".

### *Cognitive Strategy*

Therapy aim = Think about ALL the possibilities.  
Allow for possibility; eg. "I may find it difficult", "This could prove a challenge".  
Use "How can I ..." instead of "I can't ...".

## Unrealistic Expectation

Setting unrealistic and inflexible rules, which you feel, must be obtained to avoid failure. You may also place unrealistic expectations on others and so feel let down when they don't live up to your demands.

This thinking style is often referred to as 'Perfectionism'. For example: "I MUST ... (eg. do it properly)", "I SHOULD ... (eg. do something better with my life)", "They OUGHT to ... (eg. understand how I feel)".

continued over 275

### *Cognitive Strategy*

Therapy aim = Think in terms of preferences: "I'd prefer ...", or "I choose to ...".  
Develop a sense of pleasure in what you do.  
Decide on a '**good enough**' standard.

## Selective Thinking

Dismissing good things and dwelling on the unpleasant aspects; eg.: focus on being late and ignore praise from others that you got there at all.

### *Cognitive Strategy*

Therapy aim = Develop a more balanced perspective.  
Think of the pleasant things that are happening.  
Be aware of how you **pay attention**; do you focus on the donut or on the hole?

## Personalising

You blame yourself and take responsibility for anything unpleasant. Also includes mind reading (making assumptions about what someone is thinking) "My father is angry, it must be my fault. He thinks I'm so hopeless."

### *Cognitive Strategy*

Consider other reasons why people might be acting in certain ways.  
Therapy aim: generate **alternatives**.

## Typically Encountered Patient Difficulties

Attending to one's thinking processes is something that requires practice and a growing awareness. Understandably, many people find this difficult undertaking and express resistance to cognitive strategies.

Listed below a few of the typical comments expressed by patients who do experience some difficulties with this initial stage of therapy. Note that a patient's stated objections can communicate useful information in terms of their thinking processes.

### "It's too hard to think about my thoughts."

Attempts to make explicit the processing of a trigger event can be arduous initially, as many patients find it difficult to consciously attend to their thoughts and their self-talk. This is often a product of their assumption that the way you think is not affected by choice, that you can't help the way you think. It is crucial that the Practitioner addresses this assumption before continuing.

Also it's useful to try to encourage the patient to think about what they were probably thinking by asking them about the details of the trigger event:

- ◆ "What did that *mean* to you?"
- ◆ "What does that usually *mean* for you?"

---

#### **MYTH**

You can't help the way you think.

---

### "I just don't get it!"

Unless the Practitioner ensures that their patient has a grasp of the rationale for this therapy style their comprehension of the nature of the intervention will be restricted.

#### **Rationale**

That reality is only partly responsible for our reactions, and that the way in which we habitually process information about the world is the key to understanding why we react.

**The rationale assists the process of therapy.** Assessment identifies the patient's actual thoughts and beliefs in the triggering situation, which cannot be effectively completed without previous explanation of the rationale.

Cognitive strategies are most effective with patients that are able to accept the rationale's main assertion of a causal link between thought and response. If your patient is unable to grasp the concept, you may wish to reconsider the appropriateness of cognitive strategies.



## "I can't change how I think, not after all these years..."



Another difficulty which often arises at this point is the resistance exhibited by patients to the possibility of changing their thinking; patients find it hard to accept that they can consciously implement a new way of thinking once they become aware that they have been unconsciously executing automatic information-processing patterns for what they assume to have been an entire lifetime.

This resistance often indicates habitual thinking which maintains a negative focus by rejecting the possibility of improvement. Challenge your patient's disbelief, eg.

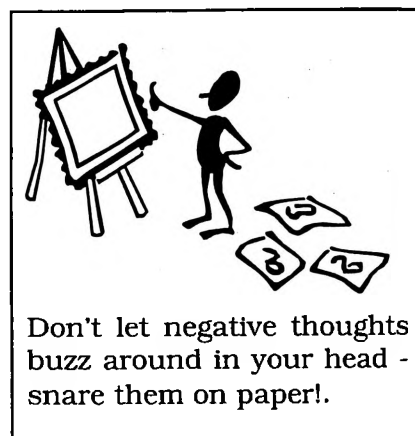
- ◆ "What makes you think you can't change the way you think?"
- ◆ "What determines the way you think?"
- ◆ "Have you always thought the same way?"
- ◆ "What evidence do you have to show you can't change?"

## "I can't remember exactly what I was thinking."

Patients will often say that they can recall the vague gist of their cognitions but have difficulty remembering the detail. The cognitive assessment phase (ie. awareness of self-talk and of the link between thought and response) requires the development of self-awareness.

Questioning in session specifies which mood states and behaviors are to be consciously attended to.

Encouraging the patient to write down their automatic thoughts is useful for ongoing change.

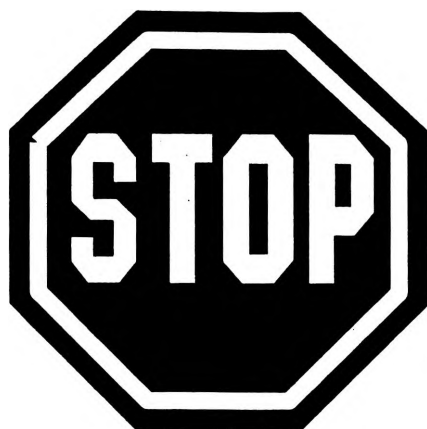


## "I don't know what I was thinking in the situation."

Patients often report that they find it difficult to identify their thoughts retrospectively:

- ◆ Encourage the patient to explore their probable thinking in the trigger situation,
  - (1) What might you have been thinking?
  - (2) What do you typically think about in that (or a similar) situation?
- ◆ Detailed recall of the accounts of events leading up to the response; exploration of beliefs about the situation, "Has this ever happened before?" or "What were (are) you usually aware of in that (or a similar) situation?"
- ◆ Exploration of the subsequent response, "What did you notice first?", "What did that indicate to you?" or "What did you think was happening to you?"

## When Cognitive Strategies are NOT Appropriate

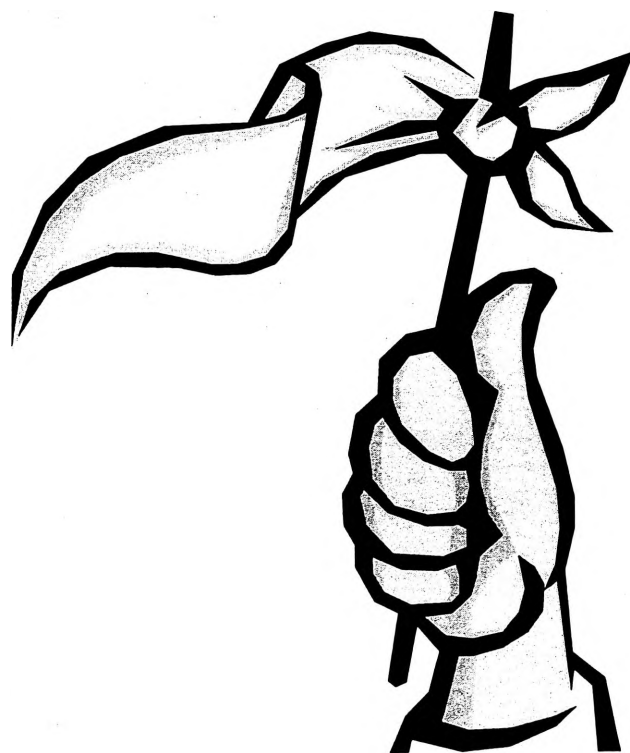


Cognitive Behaviour Therapy  
is usually not considered useful  
in the following cases:

- ❖ When the patient is acutely psychotic- trying to challenge irrational, unrealistic or bizarre thinking with someone who cannot reality test is usually pointless. Although CBT can be used when the patient is being maintained with medication, it is not considered useful when they are unmedicated. A referral to a psychiatrist is indicated in this case.
- ❖ When there is a totally external locus of control- that is, where the patient sees themselves as having no personal responsibility or ability to mediate the way that they feel or their circumstances. Such people believe that the world or external circumstances CAUSE the way that they feel and altering the way that they perceive the situation will have no impact. Some people may initially present this way, but cognitive challenging can help them to see that they have some ability to mediate their problems. Others find it ego-threatening to give up their position that the world causes their problems and this cannot be altered. This is often a feature of someone with a personality disorder. Referral for long-term psychotherapy may be indicated.
- ❖ When the patient is not collaborative. CBT cannot be “done to” or forced upon anybody. It requires that the person be prepared to test hypotheses about themselves and the world. If they are completely uncooperative and are unwilling to try this or complete any exercises, they may be inappropriate for CBT. Such people will often have the attitude “You fix me”. People who are not motivated and who are unreliable (in terms of attendance and application) will not benefit maximally from cognitive interventions.
- ❖ When the patient is inebriated or doesn’t have a good grasp of your language.
- ❖ When there is evidence of significant cognitive impairment or deficit eg. acquired or organic brain damage or Low IQ

It is important not to be critical of people who are not appropriate for CBT at the time you see them. *It is also very important to be aware of the need to refer patients on when you feel that their needs are beyond your current level of expertise (e.g., high risk of suicide).*

# Self-Care



# For Health Professionals

# Self-Care for Health Professionals

## Objectives

By the end of this component you will be able to:

- ◆ Identify several physical, psychological, interpersonal and professional strategies that can be used to help health professionals reduce the possibility of burnout.
- ◆ Make a list of strategies that you will employ to reduce your stress.

## Introduction

Spending a large amount of time caring for other people, being involved in professional development and looking after families may mean that health care professionals neglect to care for themselves. The consequences of this neglect can be burnout, a set of physical, emotional, behavioural, interpersonal and work-related symptoms of "vital exhaustion". The following strategies are important recommendations for preventing burnout in health care professionals. This information is included in the Behaviour Therapy component of this manual because it includes Arousal Reduction Strategies and other behavioural recommendations for stress management.

## Do GPs get stressed?

Studies of GPs from the UK, US, Canada & Australia show:

- increased levels of anxiety & depression<sup>1,2,3,8,9</sup>
- work-related uncertainty, isolation, disillusionment<sup>4</sup>
- job stress, exhaustion & sleep difficulties<sup>5,9</sup>
- belief that work had affected physical health<sup>6</sup>
- belief that work had impacted upon family<sup>7</sup>

Sources of stress were cited as:<sup>2,3,4,5,7</sup>

- demands of the job
- patients' expectations
- interference with family life/ role conflict
- constant interruptions at work and home
- practice administration
- time pressures/workload
- pressure to stay informed
- little free time

## Burnout

### Definition:

Burnout is “a state of physical, emotional and mental exhaustion caused by long-term involvement in emotionally demanding situations” (Pines and Aronson, 1988, p.9).

Burnout has been defined as a collection of symptoms associated with emotional exhaustion. It is a process, rather than a fixed condition, which becomes progressively worse. The process includes gradual exposure to job strain; erosion of idealism; and a void of achievement (Figley, 1995). There are physical, emotional, behavioural, work-related and interpersonal symptoms of burnout. You may observe these symptoms in yourself, your colleagues or your patients. Because it is a process, burnout may be insidious and its onset can be slow, so it is very important to take note of any warning signs that may arise and act to prevent any deterioration in the condition.

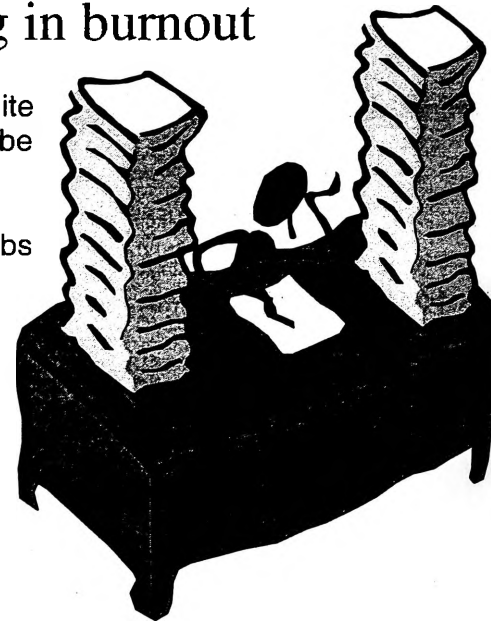
## The role of black and white thinking in burnout

People who typically think in a black and white (perfectionist) manner believe that things must be done at 100% standard or they are worthless (0%).

Standards this high, especially in high-pressure jobs can contribute to burnout.

### Hmm... do I use Black and White Thinking a lot?

- Do I tend to do tasks myself because I know they'll be done right?
- Do people always nominate me for tasks because they know they'll always get done right?
- Do I ignore praise for my work and look for the ways I could have done it better?
- Do I get really annoyed over minor mistakes made by me or someone else?
- Do I speak in absolutes a lot?
- Have I ever abandoned a task and started again because of a minor mistake?
- Do I always feel like I'm not quite good enough?
- If I learn a new skill do I always have to master it, even if it's a game?
- Do I put tasks off a lot because I feel they have to be done perfectly?
- Am I over competitive?
- Has anyone ever called me a “perfectionist”, “obsessive”?



## Burnout: Physical Symptoms

- ❖ insomnia
- ❖ fatigue and physical exhaustion
- ❖ somatic problems (eg. headaches, flu symptoms, gastrointestinal disturbances).



## Burnout: Emotional Symptoms

- ❖ irritability
- ❖ anxiety
- ❖ depression
- ❖ guilt
- ❖ sense of helplessness



## Burnout: Behavioural Symptoms

- ❖ aggression
- ❖ callousness
- ❖ pessimism
- ❖ defensiveness
- ❖ substance abuse



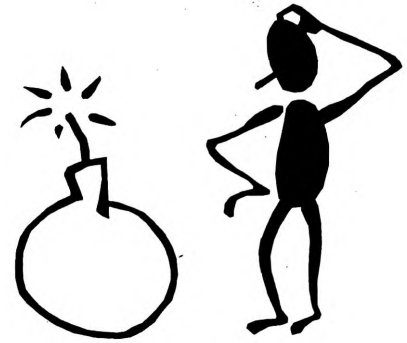
## Burnout: Interpersonal Symptoms

- ❖ withdrawal from clients and co-workers
- ❖ difficulty communicating
- ❖ inability to concentrate



## Work-Related Symptoms

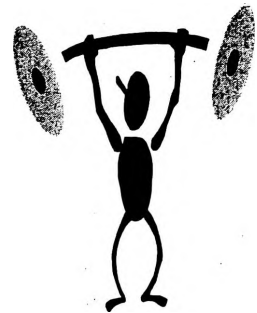
- ❖ poor work performance
- ❖ absenteeism
- ❖ quitting the job
- ❖ misuse of work breaks



The remainder of this section will outline various strategies that should be used to prevent burnout.

## Preventing Burnout:

### Physical Strategies



### Vigorous Exercise that fits your Lifestyle

Incorporate this with other needs, eg. the need for some time alone to think (eg. walking or jogging); the need to network with someone else (eg. horse riding, aqua-aerobics); the need to be competitive (eg. squash, team sports); the need to find some explosive tension-release exercise to vent frustrations (eg. kick boxing, weight lifting).

### Body Nurturance

For example: having massages, facials, warm baths, therapeutic body work.

### Adequate Sleep

If impaired sleep becomes a pattern, address this as a priority.

### Nutrition

Ensure you eat balanced meals at regular intervals. Reduce white sugar, caffeine and nicotine. Beware of changes in eating patterns due to stress (eg. overeating, under-eating).

Become aware of your eating habits and responses. Don't skip your meal breaks, allow adequate time for digestion, don't regularly eat in your car or on the go. Beware of fast foods if you have a 'fast' lifestyle.

# Preventing Burnout:

## Psychological Strategies



### Life Balance

Balance work, outside interests, social contacts, personal time and recreation. Life balance involves a commitment to life and life enhancing activities.

### Relaxation

This can be structured relaxation or fun times.

### Contact with Nature

Because we work so much with people we can forget that we are actually on planet Earth. Contact with nature can give us a larger view of the world and our place in it. Examples include bushwalks, caring for a garden, watching the night sky, snorkeling, camping, skiing, mountain climbing, caring for pets, etc.

### Creative Expression

Intellectual work and being organised and working to schedule all the time can leave our creative natures stifled. Activities that can help you express your creative sides include, writing, drawing, cooking, drama, photography, painting, dancing, handicrafts, and playing a musical instrument.

### Meditation / Spiritual Practice

There is evidence that meditation lowers blood pressure, slows breathing and relaxes muscles.

### Self Awareness

Self-awareness means knowing when outside help is needed and when you need supervision or to refer your patient on. It also means recognising when some of the things your patients say bring up discomfort. This is especially important if you have had past traumatic experiences as an adult or a child. You may need to address this in supervision or in your own psychotherapy. Self-awareness also means giving yourself time to think about who you are and where your life is going. Try to understand your current life circumstances and coping resources.

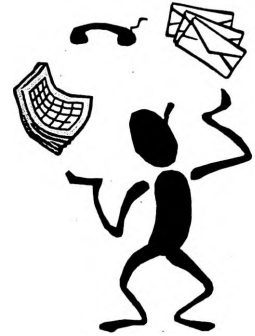
### Humour

Humour can help you gain perspective and is good for reducing stress. If you notice that it's ages since you've had a good laugh, or if your humour is always very cynical or bitter you may need to have a break or a holiday to refresh yourself.



# Preventing Burnout:

## Skill Development



### Assertiveness Training

Learn to stand up for yourself and say "NO". There are many useful books around that can give you tips on being assertive rather than passive or aggressive.

### Stress Management

Learn and practise proven techniques, eg. Progressive Muscular Relaxation, Yoga, Self-Safe Hypnosis (several will be taught in the workshop).

### Cognitive Restructuring

Evaluate whether you have any distorted thinking styles or schemas. Work on these with the techniques you learn here. Are you a perfectionist? Do you expect more of yourself than you ever would of others? Do you set unrealistic standards? Consider these and other possible faulty thinking styles (The workshop will address this more fully).

### Time Management

Learn techniques to set priorities and organise your time.

# Preventing Burnout:

## Interpersonal Strategies



### Increase Social Supports

Evaluate your support network. See whether you have people who will nurture and listen to you and give and receive feedback. If you don't you may need to add to your supports.

You may also need to educate your social supports about your needs and experiences. This may involve challenging the attitudes and skills of the people you care about.

Build in regular time with loved ones, friends and acquaintances. If possible, spend time with children, they can offer hope, beauty, joy and freshness to counteract some of the difficult things you may hear at work.

## Seek help when you need it

See this as a sign of strength. Identify people in your personal & professional life who are viewed as helpful.

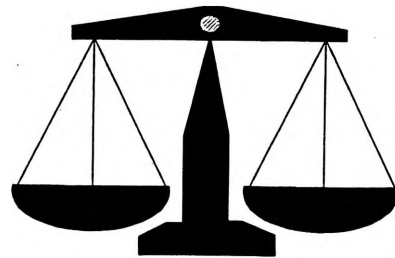
## Social Activism

Social activism involves taking a stand about issues in the community you feel strongly about. These may include domestic violence, substance misuse or child abuse.

This may help combat any feelings of powerlessness and may give you a sense of a shared mission with others.

It can also be an outlet for frustration and can combat social isolation. It also offers a chance to influence the future rather than just learn from the past.

# Preventing Burnout: Professional Strategies



## Balance

Look at your case load. Balance involves pacing: making regular time for meal breaks, consultation with colleagues, not 'squashing' people in, etc.

## Boundaries / Limit Setting

**Time Boundaries:** Be on time for appointments and try not to go over them.

**Overworking:** This includes taking on too many responsibilities; working regular overtime; taking work home or taking calls at home; being unable to separate from work emotionally; and even excessive reading. This may be an attempt to overcome feelings of inadequacy or helplessness and should be seen as a sign to slow down or seek supervision (in counselling cases).

**Therapeutic and Personal Boundaries:** Especially important when working with abuse survivors where the core of the abuse is the violation of boundaries. Determine how much you will self-disclose to clients. Understand the implications of physical touch for counselling patients - is it appropriate to the type of work you do?

**Know your Limits:** Acknowledge when you have lost direction with a case or when a case is beyond your level of expertise and refer on.

## Critical Incident Planning

Plan for emergency situations, eg. patients who commit or attempt suicide; patients who commit or threaten acts of violence; patients who present drunk, etc. Have contingency plans and debriefing set up in advance to any of these possibilities. Plans for coping can include cognitive as well as behavioural strategies and may include role-playing for preparation.

## Professional Training

Learning means that you don't get left behind when the world changes. It keeps you up to date with new technologies both in your own field and in others. It increases the skills you know you have, teaches you skills you don't have and allows you to discover abilities you didn't know you possessed. Learning increases your options and gives you the ability to make choices, rather than being limited to what the system offers.

## Getting Support / Help

Try to find peer support especially with colleagues involved in similar work to you. This can be formal or informal. This can include time spent discussing difficult cases and then talking about the feelings they give rise to. It's useful to have a variety of people you can speak to and be able to give uncensored ventilation to your feelings.

## Summary

This component discusses various physical, psychological, interpersonal and professional strategies to prevent burnout in health professionals. It also lists various areas in which skills can be developed for effective stress management.

The workshop component of this program will teach you various practical methods to achieve this end with both yourself and your patients.

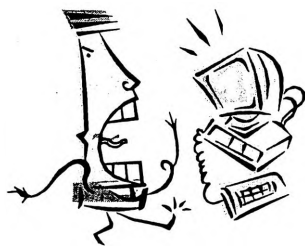
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## Eight Tried-and-True Methods to Achieve THERAPIST BURNOUT

1. Work long hours - especially nights and Saturdays. Try to work all holidays.
2. Take on lots of hard cases and see them one after another, preferably three or four in a row. Think about them when not at work - at dinner and 3 a.m. are good times.
3. Take just one vacation a year, if you must. But carry along professional books to read in your motel room and check your messages for emergency phone calls every day.
4. Base your self-esteem exclusively on your work. Don't seek a personal life - your clients need you too much.
5. Don't spend any money on a nice office - why would you want to be in a comfortable, attractive environment all day?
6. Believe you can be a winner with every case. Whether it involves affairs, obsessions, narcissism, bulimia, depressed people who can't start laughing, manic people who can't stop laughing - bring them on! And remember, if there's no progress, it's *your fault*.
7. Don't be ambitious. Don't think of opening your own place or think of growing financially - that's for business people.
8. Live your life without friends, lovers or family. If you have accidentally acquired a family, ignore them. If you are alone, keep on searching for Ms or Mr Right -even if it takes a lifetime. Never settle for the merely human.

Adapted from Richard Belson



## Sources of Stress Questionnaire

To find out which are the common sources of stress for you, read the following questions and tick 'Yes' or 'No' for each item.

### Section 1 - Do you often find that you:

	Yes	No
1. Are late for appointments?	<input type="checkbox"/>	<input type="checkbox"/>
2. Stay late at work for more than an hour to finish things?	<input type="checkbox"/>	<input type="checkbox"/>
3. Cancel social engagements or leisure activities due to work?	<input type="checkbox"/>	<input type="checkbox"/>
4. Have to work in a rush at the last minute to meet a deadline?	<input type="checkbox"/>	<input type="checkbox"/>
5. Set yourself unrealistic deadlines and have to extend them?	<input type="checkbox"/>	<input type="checkbox"/>
6. Are unsure which of your priorities should take precedence?	<input type="checkbox"/>	<input type="checkbox"/>
7. Fail to make a note of meetings or tasks to be done?	<input type="checkbox"/>	<input type="checkbox"/>
8. Are busy and overworked but never seem to get anything finished?	<input type="checkbox"/>	<input type="checkbox"/>

### Section 2 - Do you often find that you:

	Yes	No
1. Say 'Yes' when you really want to say 'No'?	<input type="checkbox"/>	<input type="checkbox"/>
2. Don't know how to say what you want to say?	<input type="checkbox"/>	<input type="checkbox"/>
3. Say 'No' and feel guilty afterwards?	<input type="checkbox"/>	<input type="checkbox"/>
4. Feel manipulated?	<input type="checkbox"/>	<input type="checkbox"/>
5. Get emotional when you know you should be stating your views calmly?	<input type="checkbox"/>	<input type="checkbox"/>
6. Feel embarrassed /unable to admit you don't understand something?	<input type="checkbox"/>	<input type="checkbox"/>
7. Apologise for saying what you want?	<input type="checkbox"/>	<input type="checkbox"/>
8. Are unable to ask directly for what you want?	<input type="checkbox"/>	<input type="checkbox"/>

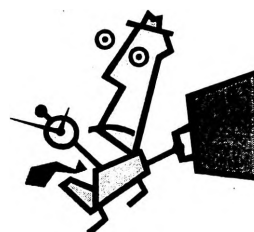
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**Section 3 - Do you often find that you:**

	<b>Yes</b>	<b>No</b>
1. Are unnecessarily sharp or irritable with other people?	<input type="checkbox"/>	<input type="checkbox"/>
2. Take a long time to wind down after a stressful event?	<input type="checkbox"/>	<input type="checkbox"/>
3. Are unable to switch off at the end of the day?	<input type="checkbox"/>	<input type="checkbox"/>
4. Have trouble getting a full night's sleep?	<input type="checkbox"/>	<input type="checkbox"/>
5. Get angry over little things?	<input type="checkbox"/>	<input type="checkbox"/>
6. Feel excessively 'hyped up' or on edge?	<input type="checkbox"/>	<input type="checkbox"/>
7. Become tense before you even go into some situations?	<input type="checkbox"/>	<input type="checkbox"/>
8. Work through the day without taking a proper break?	<input type="checkbox"/>	<input type="checkbox"/>

**Section 4 - Do you often find that you:**

	<b>Yes</b>	<b>No</b>
1. Feel tired and listless for no apparent reason?	<input type="checkbox"/>	<input type="checkbox"/>
2. Have recurrent headaches?	<input type="checkbox"/>	<input type="checkbox"/>
3. Use drinking or smoking to help you cope?	<input type="checkbox"/>	<input type="checkbox"/>
4. Have tense and aching muscles?	<input type="checkbox"/>	<input type="checkbox"/>
5. Suffer from indigestion?	<input type="checkbox"/>	<input type="checkbox"/>
6. Rely on a lot of coffee to keep you going?	<input type="checkbox"/>	<input type="checkbox"/>
7. Go through a whole week without any physical exercise?	<input type="checkbox"/>	<input type="checkbox"/>
8. Don't have time to eat properly?	<input type="checkbox"/>	<input type="checkbox"/>



**Section 5 - Do you often find that you:**

	Yes	No
1. Allow criticism to get you down?	<input type="checkbox"/>	<input type="checkbox"/>
2. Feel a lack of confidence in your own ability?	<input type="checkbox"/>	<input type="checkbox"/>
3. Worry that something will go wrong?	<input type="checkbox"/>	<input type="checkbox"/>
4. Let small things get you down?	<input type="checkbox"/>	<input type="checkbox"/>
5. Feel unsure about how good you really are?	<input type="checkbox"/>	<input type="checkbox"/>
6. Concentrate on what is wrong rather than on what is right?	<input type="checkbox"/>	<input type="checkbox"/>
7. Fail to give yourself credit and reward yourself when things go right?	<input type="checkbox"/>	<input type="checkbox"/>
8. Fail to spot areas where you might improve?	<input type="checkbox"/>	<input type="checkbox"/>

**Section 6 - Do you often find that you:**

	Yes	No
1. Feel isolated and alone?	<input type="checkbox"/>	<input type="checkbox"/>
2. Have no one to turn to for practical advice?	<input type="checkbox"/>	<input type="checkbox"/>
3. Want to manage your life better but don't know where to start?	<input type="checkbox"/>	<input type="checkbox"/>
4. Feel overly dependent on one or two other people?	<input type="checkbox"/>	<input type="checkbox"/>
5. Wish you were more independent and self-sufficient?	<input type="checkbox"/>	<input type="checkbox"/>
6. Cannot seem to break a habit you would like to lose?	<input type="checkbox"/>	<input type="checkbox"/>
7. Have no one to turn to for emotional support?	<input type="checkbox"/>	<input type="checkbox"/>
8. Have nothing much in life other than your work?	<input type="checkbox"/>	<input type="checkbox"/>



## Scoring the Questionnaire

Add up your 'YES' responses for each section and enter your scores on the table below:

Section	'Yes' Score	Stress Management Strategy
1		Organisation and Time Management
2		Effective and Assertive Communication
3		Relaxation
4		Healthy Lifestyle
5		A Positive Attitude and Self-Esteem work
6		Support

Your 'YES' scores (greater than 4) will indicate which stress management techniques you need. The results of the above questionnaire should point you to the areas you need to work on in your life.

Reference: MAKIN, P. E. & LINDLEY, P. A. (1991)

Did you understand the previous component? To test your knowledge of this topic you may choose to write your answers to the following questions in the spaces provided.



Homework Exercise

1. List two strategies from each of the following sections that can be used to prevent burnout in health professionals.

Physical:

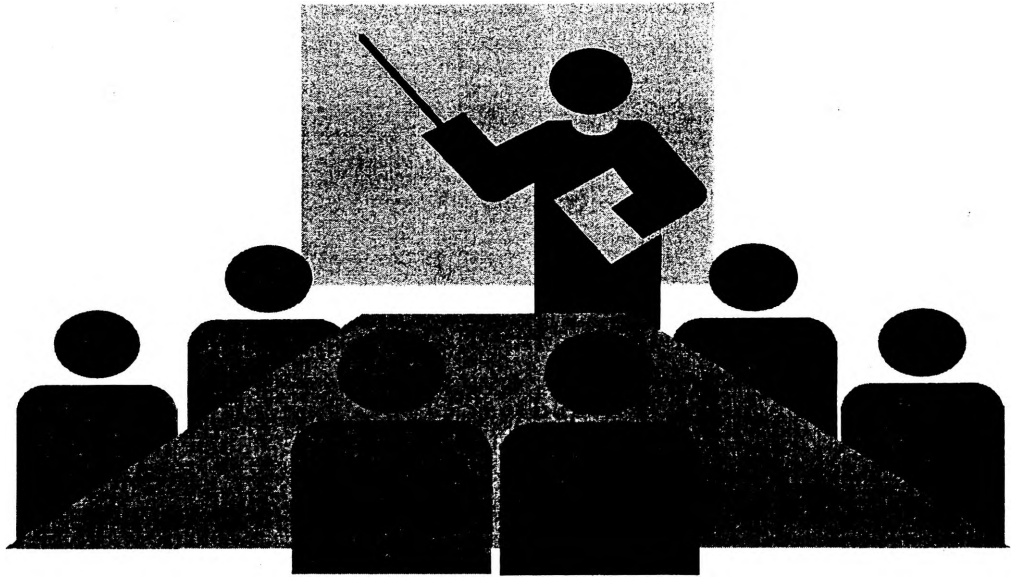
Psychological:

Interpersonal:

Professional:

2. Make a list of some strategies that you have read that you personally will choose to increase or implement in your life.

# Workshop



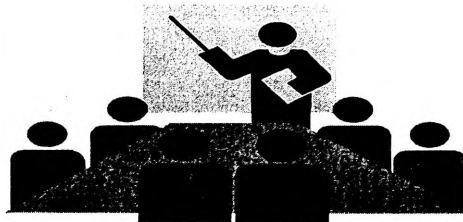
## Exercises

All activities from this page onwards will be covered at the workshop. You have completed the expected pre-reading and are not expected to have read the rest of the manual. Reward yourself for getting to here!

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### Workshop Exercises

The following 3 exercises are to be completed at the workshop



1.

Different patients have made the following statements. You want to understand exactly what they are trying to tell you. What behavioural assessment technique could help you do this? \_\_\_\_\_

What questions could you ask to help make their language more concrete and objective? Write your answers below.

*"I'm just so hopeless at everything. I stuff everything up"*

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*"I want to get my life back together. I'm sick of being in this hole"*

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*"Jamie is driving me crazy. I think he's got that ADD thing I've heard about. He's just berserk at home. I can't control him"*

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2. Read the following case study. Complete the Before / During / After analysis at the end.

## Joe

Joe is a farmer. He comes to see you asking for some medication to make him "less angry". You operationalise what he means by the word "angry" and he tells you that he shouts, swears and breaks things. You ask him to describe the last occasion that he became angry. He stated that he came home feeling stressed and his kids were fighting. His wife was yelling at them and the phone was ringing. He wanted to watch the TV but he couldn't find the remote control. After asking, without answer, several times if anyone knew where it was, he became angry and started to shout. He pulled the phone out from the wall and threw it to the ground. His children became quiet and left the room. His wife came and sat next to him and started to talk.



What happened immediately BEFORE Joe became angry? What were his behaviours DURING the outburst? What happened immediately AFTER he became angry? Could any of the things that happened after he became angry be reinforcing? Can you think of any interventions that could be made at each stage?

	What happened?	Interventions
Before		
During		
After		

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3. Read the following case study. Complete the Before / During / After analysis at the end.

## Martin

Martin is a student. He is worried that he has Multiple Sclerosis. He has read about the disorder and believes that the "electrical tingling sensation" he feels in his hands and fingers and sometimes in his feet and legs are symptoms of degenerating nerves due to MS. He knows that MS can sometimes be difficult to detect and he has seen many doctors to try to determine whether or not he has it. In fact, Martin has seen 10 different GPs and specialists in Australia with regards to this problem and has also had tests done in the United States and the UK (while studying overseas). None of the tests have diagnosed, or even hinted at, MS. All of the doctors have told him that given all of the tests available they are 99% certain that he does not have MS.

Martin knows that no one can definitively exclude the diagnosis and believes that the tests must have missed the disease. He keeps checking. Whenever he notices the tingling he thinks about the problem and has an image of himself in the future as being helplessly ill and totally dependent upon his family for survival. When he feels this bad he rushes to his GP for reassurance. Martin is so distressed about the problem he is now clinically depressed. He is now in your hometown and has already been to see you three times.



Can you guess at Martin's problem?

What happens immediately BEFORE Martin becomes most distressed? What are his behaviours when he gets most upset (DURING)? What happens immediately AFTER he gets upset? Could any of the things that happen after he gets upset be reinforcing? Can you think of interventions that could be made at each stage?

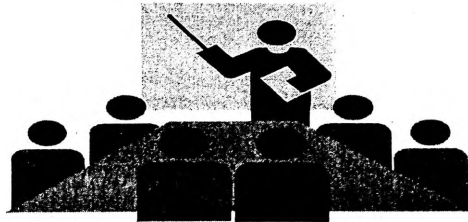
### What happened?

### Interventions

Before		
During		
After		

## Workshop Exercise

This exercise is to be completed at the workshop



### Aim of this Exercise

To demonstrate how thoughts affect behaviour.

### Exercise

List some of the possible cognitions (self-talk) in the middle column that could account for the responses in the last column.

<p><b>A</b></p> <p>Actual Event</p>	<p><b>B</b></p> <p>Beliefs/ Thoughts/Interpretations</p>	<p><b>C</b></p> <p>Consequences -Emotions -Behaviours -Physical Reactions</p>
<p>Phil is complimented by a colleague on a recently completed job.</p> <p>Karin is asked to see the Principal of her College.</p> <p>Jon is at a B.B.Q with 20 friends and family.</p> <p>Pete is at the Cinema to see a new film with an old friend.</p> <p>Kerry is offered a job promotion.</p>		<p>Phil punches his colleague fair in the face!</p> <p>Karin feels ill, can't concentrate and wants to throw up.</p> <p>Jon feels lonely.</p> <p>Pete feels dizzy and can't breathe; he leaves before the film is over.</p> <p>Kerry turns it down feeling dreadful about the offer.</p>

## Workshop Exercise

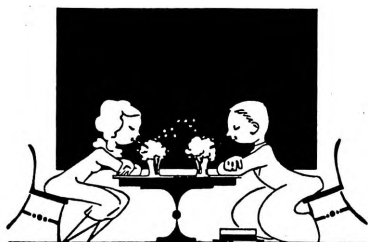
This exercise is to be completed at the workshop



### Aim of this Exercise

To demonstrate individual attention and interpretation (ie. different thinking styles).

### Exercise



Three young women walk into a reasonably crowded Cafe, several of the seated patrons look up from their coffees towards the women as they take their seats. The first woman is so pleased to be seated she hardly notices the attention, the second woman wishes the patrons would just mind their own business and stop staring at her, she begins to feel somewhat irritated. The third woman feels self-conscious and wonders what they're all staring at and what she's done wrong, she starts to feel awkward and slightly anxious.

Generate thoughts or self-talk (ie. elicit the cognitions) which could account for the different reactions of each of the women to that same situation:

First Woman:

Reality	individual interpretations	Response
Being seated in a crowded Cafe, drawing the attention of a few people.		Satisfied at receiving service. Glad to rest, keen to order.

Hint: "Ahh.... My poor feet! It's so good to sit down."

Second Woman:

Reality	individual interpretations	Response
Being seated in a crowded Cafe, drawing the attention of a few people.		Slight hostile edge to her interactions. Edgy and irritable.

Third Woman:

Reality	individual interpretations	Response
Being seated in a crowded Cafe, drawing the attention of a few people.		Withdrawn and seems shy. Increased anxiety and urge to flee.

The 'reality' for each of the women in the above example is the same: they are in the same Cafe, drawing the same attention from the same people; what differs is their individual thought processing. Each woman interpreted the same situation in a very different manner; their differing responses illustrate how **the interpretation of an event is far more significant than the actual event itself.**



## Workshop Exercise

This exercise is to be completed at the workshop



AIM: to identify unhelpful and invalid thinking styles..

INSTRUCTIONS: Identify the thinking habits that are operating in each situation below

- ① Kate is at a busy Cafe with a friend, the service is bad. She thinks "I must have offended the waitress somehow."

ANSWER: .....

- ② William drops his two children off at school, and watches them run to the playground. He thinks, "I should be happy all the time. I have no right to ever feel down."

ANSWER: .....

- ③ Gina is talking with her daughter's boyfriend. She thinks, "This is the second time he's interrupted me. He is obviously bored with my story and thinks that I am really dull to talk to."

ANSWER: .....

- ④ The manager returns a report -which Matthew has prepared - commenting that it was a good piece of work, but there were a few typing mistakes that would need correcting. Matthew thinks "How stupid of me not to pick up those errors."

ANSWER: .....

- ⑤ Ray burnt the pie crust while preparing dinner. He thinks, "Now the whole meal is ruined."

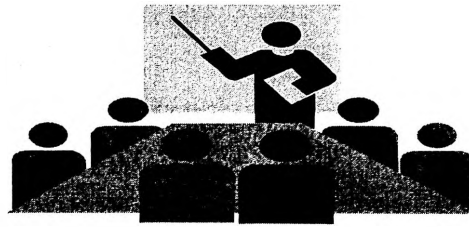
ANSWER: .....

- ⑥ Rita discovers she'd won an overseas holiday. She thinks, "What if the plane crashes?"

ANSWER: .....

## Workshop Exercise

The following two exercises  
will be completed at the  
workshop



# ANTS Exercises



## Aim

To become familiar with the identification and labelling of common cognitive distortions (AUTOMATIC NEGATIVE THOUGHTS- ANTS).

## Instructions

Read the following dialogues and underline the patient's phrases that indicate ANTs. Identify the type of ANT and write the name in the column provided.

## Case 1: "Lazy"

<p>PRACTITIONER: "So you've been feeling very run down and tired lately? How long has this been going on?"</p>	
<p>PATIENT: "Around about 3 weeks now. I'm just lazy I guess. I should make more of an effort to be productive. I always have been slack. It's just that I'm worried that maybe there's something really wrong, like I've got cancer or something".</p>	
<p>PRACTITIONER: "Well it's a good thing that all of your blood tests have come back negative. I wonder whether there have been changes in your life lately that could be contributing to this tired feeling? Have you changed your diet maybe or has anything negative been going on lately?"</p>	
<p>PATIENT: "You think its all in my head don't you? You think I'm crazy! Well I may be stupid, but I'm not crazy. You don't know how tired I've been (begins to cry). Oh great- there I go, bawling like a baby. Now you really think I'm nuts. Look, what if you're not taking it seriously and you've missed what's really wrong with me".</p>	<p>303</p>

# ANTS Exercise

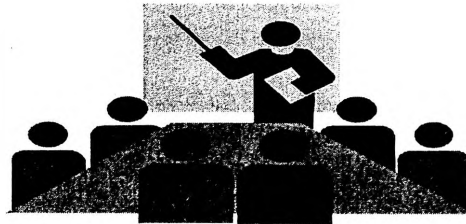


## Case 2: "Standards"

<p>PATIENT: "Have you got any pills to help me get a kick start with things Doc? Since I've retired I just don't have any get up and go".</p>	
<p>PRACTITIONER: "Have you been feeling unwell or tired?"</p>	
<p>PATIENT: "No, not at all. It's just that I've got all these jobs lined up waiting for me to get into them and I can't seem to get up the drive".</p>	
<p>PRACTITIONER: "Are you just relaxing do you think? Letting things go for a while?"</p>	
<p>PATIENT: "No- that's just not me, and I can't relax. My wife's on my back all the time to get the work done and I feel bloody useless because I do nothing all day."</p>	
<p>PRACTITIONER: "Really? Nothing at all?"</p>	
<p>PATIENT: "Oh well, you know, I've just finishing putting up the pergola, but it took me forever and it looks like crap. I might as well have not even started it".</p>	
<p>PRACTITIONER: "So it looks really bad? It's not doing what it's meant to?"</p>	
<p>PATIENT: "Oh it does what I designed it for. No one else has really noticed anything wrong with it, but one of the panels has a dent in it, so as far as I'm concerned, the whole effort was a waste of time."</p>	304

### Workshop Exercise

This exercise is to be completed at the workshop



## Clinical Example: Depression

### *Aim of this Exercise*

To elicit the thoughts and thinking style of a patient presenting in a clinical setting

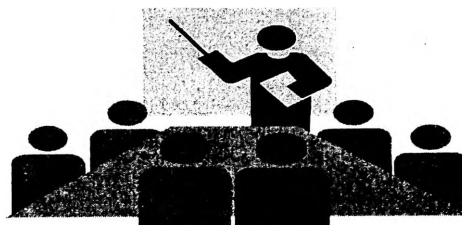
### *Exercise*

**AUDIO-VISUAL PRESENTATION:** Pay attention to the video recording of the clinical example "Ruth" and record the thoughts (eg. "I ..." statements; expressed ideas, judgments etc.) that you identify below.

<b>A</b> Actual Event	
<b>B</b> Beliefs/ Thoughts/ Interpretations	
<b>C</b> Consequences <ul style="list-style-type: none"><li>• Emotions</li><li>• Behaviours</li><li>• Physical Reactions</li></ul>	

### Workshop Exercise

This exercise is to be completed at the workshop



## Clinical Example: Panic Disorder

### Aim of this Exercise

To assess the effect of thoughts using a cognitive assessment.

### Exercise

Consider the case of a woman in her late-20's who presents to your Practice with chronic chest pains and complaining of dizziness and feelings of unreality; tingling in her hands and lips; breathlessness; hot and cold flushes and choking sensations. She has been brought straight to you after suffering a suspected cardiac arrest while waiting in a lengthy queue at her local Bank.

The young woman is fit and of healthy weight / height ratio; has no history of, or symptoms consistent with, bronchial or cardiac disease; does not smoke, drink or use recreational drugs; she is extremely agitated and in obvious distress. Her heart and respiration rate are elevated; she is clammy to the touch; and has difficulty supporting her own weight unassisted.

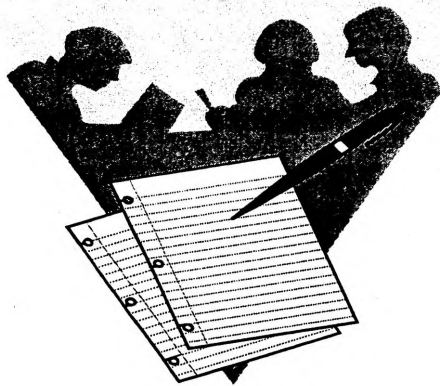
She is released hours later after his presenting symptoms spontaneously remitted. ECG readings show no cardiac injury or impairment.

**AUDIO-VISUAL PRESENTATION:** While watching the role play of the interview with the patient in the above case; complete the initial assessment below.

<b>A</b> Actual Event	
<b>B</b> Beliefs/ Thoughts/ Interpretations	
<b>C</b> Consequences <ul style="list-style-type: none"><li>• Emotions</li><li>• Behaviours</li><li>• Physical Reactions</li></ul>	

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## Small group exercises- Providing a rationale



Consider the cases below. With your group generate a list of key points that you think would be important when giving a rationale about why these patients may want to try a psychological approach to treat their problem(s).

### Case One: EUNICE

Remember Eunice from the video? How will you explain to her what her symptoms are? You could use your cognitive assessment (ABC analysis), your understanding of the physiological changes associated with anxiety, and your impressions of her generally to generate some key points for your rationale for her to consider a psychological approach to managing her symptoms.

Case Two: GRAHAM

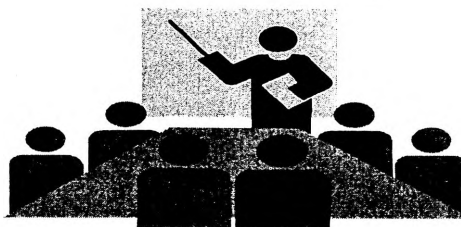
Graham keeps getting stomach cramps and headaches. He's had plenty of medical tests done and all of them find no evidence of pathology. Graham has a high stress job and is a perfectionist and you're pretty convinced that his pain is caused by tension/anxiety and lifestyle factors. You'd like to try some cognitive and behavioural techniques. With your group write down some key points you will want to talk to him about in your rationale for trying these approaches.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Now you have generated some important key points for your rationale, grab a partner and practice putting it into your own words. One of you should say the rationale to your partner as though they were Eunice, then swap roles and practice saying the rationale to Graham.

## Workshop Exercise

This exercise is to be completed at the workshop



## Breaths Per Minute

This exercise will determine the rate that you are breathing. It will tell you whether your respiration rate when at rest is within 'normal' limits, or whether it is excessive.

Use the exercise at different times during your day and note whether there are certain times when your breathing rate is higher. It will, of course, be higher if you have been exerting yourself, but you will also find it is higher when you are in a stressful situation. This exercise can be done anywhere - all you need is a watch with a second hand.

1. To see what your breathing rate is sit quietly, and count the number of breaths you take IN, during a 60 second interval
2. Write it down here: \_\_\_\_\_
3. If yours was greater than 14, try to slow your breathing rate down by taking fewer breaths through your nose. Close your eyes if you feel comfortable. Try to get your breathing rate down as slow as you *comfortably* can.
4. Record this new rate here: \_\_\_\_\_

*Your breathing rate when you are at rest should ideally be between 10 and 14 breaths per minute.*

If you originally had above 20 breaths per minute it will take you a few weeks of practice until you can get it down to within 'normal' limits.

2

Did you find this exercise slowed your breathing rate down? Was your breathing rate within the 10 - 14 second range? If not, do you think that you may overbreathe habitually? Test it out when you are relaxed tonight.

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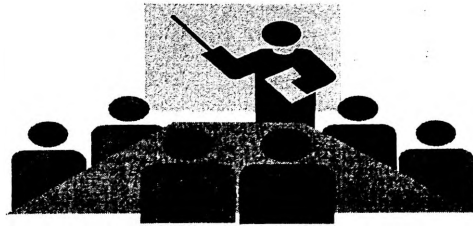
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### Workshop Exercise

This exercise is to be completed at the workshop



## ‘Six-Second Cycle’

This exercise should be used at the first signs of overbreathing. That is, you need to learn to recognise the signs of overbreathing and immediately do this exercise.

The ‘6 Second Cycle’ involves taking about 1 breath every 6 seconds. The following exercise shows how to slow breathing to this rate.

1. Breathe out and say the word “relax” to yourself in a calm, soothing manner
2. Now breathe in and out slowly in a six-second cycle. Breathe in for three seconds and out for three seconds. This will produce a breathing rate of 10 breaths per minute. Say the word “relax” to yourself every time you breathe out. Try to breathe in a smooth and light manner
3. At the end of each minute (after 10 breaths) hold your breath again for 10 seconds and then continue breathing in the six-second cycle
4. Continue breathing in this way until all the symptoms of overbreathing have gone

Q

Did you find this exercise slowed your breathing rate down? Did you find that you could follow the 6-second cycle comfortably? If not, was it too fast or too slow?

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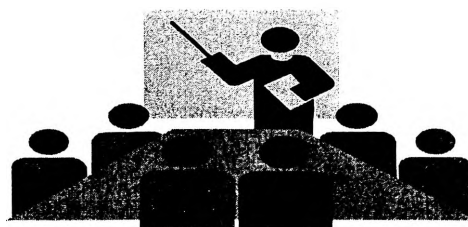
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### Workshop Exercise

This exercise is to be completed at the workshop



## ‘Buddha Belly’

This exercise helps to correct breathing patterns. Many people who are prone to overbreathing tend to take very shallow breaths from their chest region - almost as though they are panting. The chest region is not made for sustained and relaxed breathing however. This should come from the diaphragm.

The Buddha Belly exercise physically demonstrates how to breathe from the diaphragm. It's fun too!

1. Either lie down flat on your back or sit up very straight in a chair
2. Place your hands flat upon your diaphragm area, just below your chest
3. Move your hands so that your finger tips are just touching each other
4. Make sure your hands are resting lightly on your diaphragm and your finger tips are only just touching
5. Now start to take deep, slow breaths from your diaphragm. You will know if you are breathing from your diaphragm because if you are, your finger tips will move slightly apart from one another as you breathe in
6. Practise this until you are breathing slowly and deeply from your diaphragm with your finger tips moving gently away from one another then back to touching each time you breathe in and out
7. Remember that this is the area you should be breathing from normally during the day

Q

Did you find this exercise slowed your breathing rate down? Did you find that you could follow the Buddha Belly instructions comfortably? If not do you know why?

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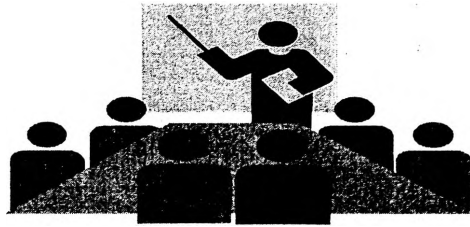
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### Workshop Exercise

This exercise is to be completed at the workshop



## Visualisation

This breathing exercise is good for people who are good with visual imagery. Some people use it to help them to meditate, as it is useful to help block other thoughts as you focus only on your breathing.

1. Sit or lie down somewhere and close your eyes
2. Imagine that in front of your forehead is the Number 1
3. Now imagine that as you breathe in slowly through your nose, the Number 1 is drawn closer and closer to your forehead until finally it is stuck to the middle of your forehead
4. Then release that breath - slowly, slowly - and imagine that as you breathe out, the Number 1 slides from your forehead, down through your face and is blown out of your mouth
5. Now see the Number 2 on your screen in front of you. Repeat the procedure, remembering to breathe deeply and slowly, in through your nose and out through your mouth
6. Repeat this procedure until you reach Number 20

Q

Did you find this exercise slowed your breathing rate down? Did you find that you could 'see' the numbers easily? Do you think you could use this exercise to calm yourself down?

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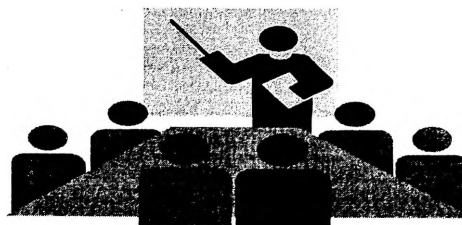
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### Workshop Exercise

This exercise is to be completed at the workshop



## Hyperventilation Exercise

One way to ensure that patients have mastered the controlled breathing techniques is to have them use them to stop deliberately induced hyperventilation in your office. This is where the patient is shown how to significantly overbreathe, to observe the sensations that arise, and then to stop these sensations using one of their newly mastered breathing techniques.

This exercise can be used with patients as an exposure task to demonstrate to them that:

- i. the sensations that arise are predictable and match the sensations they may have experienced previously when they have been overbreathing. This helps to challenge cognitions like, "I am having a heart attack"; "I'm going crazy"; "I have a disease".
- ii. that they can stop the sensations themselves using the techniques that you have taught them. This is behavioural evidence that they will not die and that they have control. If you do the procedure with them and report your own symptoms at the conclusion of the task, it reinforces the fact that the symptoms that arise are simply a normal physiological response to taking in more air than the body needs.
- iii. there are certain sensations that happen to them when they are overbreathing and that they should be aware of these sensations in the future and respond to them as soon as they start to arise.

## Important Points

When using the hyperventilation exposure task with patients you should make sure you have covered the following points BEFORE BEGINNING:

- Give the patient a rationale / explanation about hyperventilation - explain what it is and that it is not dangerous
- Have them complete the Breaths Per Minute Exercise to determine whether their current breathing rate is high and to give them physical evidence of this if this is the case
- Teach them *and practise with them* at least two controlled breathing techniques before you start and ensure that they understand how to use them and feel comfortable with them. They may need to practise them at home for a week first.
- Explain the symptoms they are likely to experience.

- Make sure you have their full consent to go ahead and that they understand why you are doing this exercise. Encourage them to see it as an 'experiment' to test out your rationale
- If you feel that the person is unsuitable for Cognitive Behaviour Therapy do not use this procedure
- Make sure their breathing rate has reduced and that symptoms have dissipated before they leave your office

Remember, with any form of exposure therapy there is the possibility that the problem can be made worse if the procedure is not implemented carefully. Set it up properly before you begin and if you are worried that the person will not cope with a temporary rise in anxiety skip the hyperventilation exercise and just teach the breathing techniques.

OK. Now for the fun part! Here's where we do the Hyperventilation Exercise. First, choose a controlled breathing technique you found useful or effective. You will use this at the end of the exercise to return your breathing rate to 'normal'.

In a moment we will together breathe deeply through our mouths at the rate of one breathe per second. When you notice the symptoms of overbreathing (eg. dizziness, light-headed feeling, spots before your eyes; etc.), stop breathing and use your slow-breathing exercise to reduce your respiration rate. Remember it will take a while to start to work, and sometimes the symptoms can increase for a while (especially if you hold your breath after breathing so quickly).

When you have reduced the symptoms complete the following exercise.

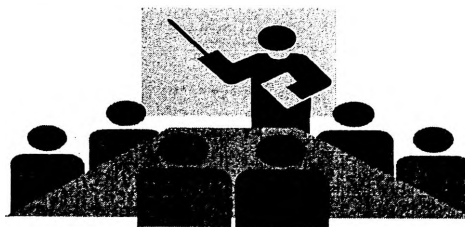
$$Q$$

Write down what you noticed happening to you or your body when you were overbreathing. Then count your breaths per minute and ensure that your respiration rate has been lowered to within 'normal' limits.

[illegible]

### Workshop Exercise

This exercise is to be completed at the workshop



## Self-Safe Hypnosis

This technique can help you to take your mind off your thoughts, and it also makes you aware of things in your environment which can help your body to calm down and make you realise you are safe. You don't have to close your eyes to do this. The more you practise it, the better you will get. We will practise this together.

1. Look around your immediate environment and say:

5 things you can see around you  
5 things you can hear  
5 things you can feel touching your body

2. Then say:

4 things you can see  
4 things you can hear  
4 things you can feel

3. Then go down to 3 things you can see, hear and feel, then 2 things, then 1.

It doesn't matter if you get them out of order, or if you lose count. If you can, say them out loud, or in a whisper, or if you are in public, saying them in your mind will do.

Q

What happened to what you were thinking before you started this exercise? Did you notice any sensations in your body? What did they feel like? Did you experience any relaxation?

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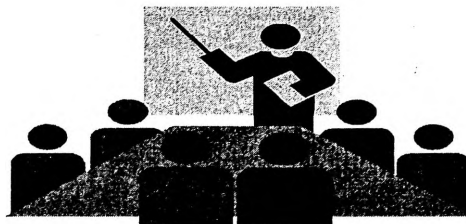
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315

### Workshop Exercise

This exercise is to be completed at the workshop



## Isometric Exercises

The aim of these exercises is to help you to notice how tense your muscles are, and then to relax them; and to slow your breathing rate down. They can be done at home or while you're out, sitting down, or standing up, they can even be done while you are driving a car!

The basic idea behind isometrics is to pick one muscle group, and to tense it. While you are tensing those muscles, breathe in through your nose, and count to 5 fairly slowly. Then slowly release the muscles, letting your breath out slowly as you do. As you release the tension, allow the muscles to become as relaxed as you possibly can, and say the word "RELAX" to yourself several times. Here are some positions to try. Remember to follow the basic procedure explained above, and don't forget to breathe.

#### *Sitting Down:*

- Tense your leg muscles by raising your feet off the floor (knees bent).
- Do the same as above, but with legs straight out in front of you.
- Press your feet down into the floor.
- Press your arms back into the sides of the chair.
- Press your palms down on the arms of the chair.
- Push your shoulders / back into the chair.

#### *Standing Up:*

- Put your arms behind your back and clasp your hands together.
- Stand on tip-toe.
- Press your palms together in front of you, flexing your chest muscles.
- Join your hands behind your head and stretch backwards.
- Crouch down slightly, stretching your calves.

Try to think of some of your own, or combine some.

Q

Did you find these techniques useful? Do you think you could use any of these in public without anyone noticing? Did you experience any feelings of relaxation?

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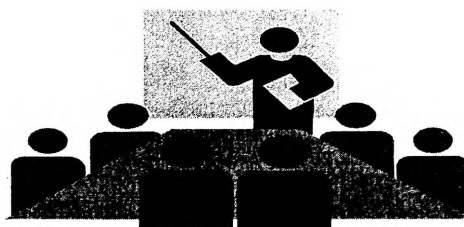
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316

### Workshop Exercise

This exercise is to be completed at the workshop



## Distracting Your Thoughts

When we start to notice our body becoming anxious, we may start to think about these changes. This in time can make us more anxious. This increase in anxiety creates more changes in your body (the 'Fight / Flight' response kicks in), and you may think about these changes. This makes us more anxious and the cycle escalates.

Also if we dwell on things that have made us angry, we can become more and more stressed out. Often these things are beyond our control, and the only thing that thinking about them does is make you angrier.

In situations like these, it's important to have something to take your mind away from your thoughts, something to **distract** you. Try the following exercises.

1. Observe what is happening around you. Look at people and try to imagine what kind of house they live in, whether they have any pets, what they do for a living, whether they would be easy to get along with or not, what kind of underwear they have on! etc. ... Before you know it, you have lost the train of thought you had before.
2. Look at an object around you (eg. a tree). Try to guess how old it is, who made it, what it feels like to touch it, smell it, or taste it.
2. Look at a painting on the wall. Try to imagine the person who painted it. Try to imagine them actually in the process of painting it. Imagine yourself inside the painting, walking around inside there looking at it, touching the things in the picture.

**Q** Did you find that any of these exercises helped to distract your thoughts? Do you think that you could try to use one of them the next time you find yourself becoming stressed, angry or anxious?

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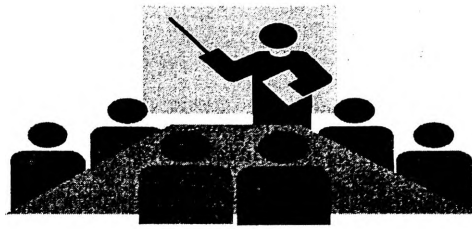
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## Workshop Exercise

This exercise is to be completed at the workshop



Statements	Position on ABC form
My boyfriend had a car accident	
I feel stupid	
My heart beat races	
I feel miserable	
I'm useless	
We went shopping	
Rollar coasters are fun	
My sex drive has disappeared	
My boyfriend hates me	
I think I failed the test	
I failed the test	
They're a bunch of losers	
I have no energy	
Everyone was looking at me. They think I'm a fool	
I feel worthless	
Our prime minister sucks	
I'm not a real man because I have no sex drive	
I have a cold	
I can't work there anymore	
I feel run down	

<p><b>A</b></p> <p><b>Actual Event</b></p>	<p>"What happened?"</p>
<p><b>B</b></p> <p><b>Beliefs/ Thoughts</b></p>	<p>"What did she think?"</p>
<p><b>C</b></p> <p><b>Consequences</b></p>	<p>"How did she feel?" "What did she do/say?" SUDS ____ /10</p> <p>"What Physical Reactions did she have?"</p>
<p><b>D</b></p> <p><b>Dispute</b></p>	<ol style="list-style-type: none"> <li>1. What evidence supports this thought?</li> <li>2. What evidence does not support this thought?</li> <li>3. Is this thought helpful- does it help her feel better about things? YES/ NO</li> <li>4. Is she using any Automatic Negative Thoughts (ANTs)? Use ANTs sheet if you like</li> <li>5. Based on the evidence, is there an alternative, or a more useful way of thinking about or understanding this situation?</li> </ol>
<p><b>E</b></p> <p><b>Evaluate</b></p>	<p>"How do you think she may feel now?" SUDS ____ /10</p>

319

# Thought Analysis for Eunice

This exercise is to be completed at the workshop

<p><b>A</b> Actual Event</p>	<p>"What happened?"</p>
<p><b>B</b> Beliefs/ Thoughts</p>	<p>"What did she think?"</p>
<p><b>C</b> Consequences</p>	<p>"How did she feel?" "What did she do/say?" SUDS ____ /10 "What Physical Reactions did she have?"</p>
<p><b>D</b> Dispute</p>	<ol style="list-style-type: none"> <li>1. What evidence supports this thought?</li> <li>2. What evidence does not support this thought?</li> <li>3. Is this thought helpful- does it help her feel better about things? YES/ NO</li> <li>4. Is she using any Automatic Negative Thoughts (ANTs)? Use ANTs sheet if you like</li> <li>5. Based on the evidence, is there an alternative, or a more useful way of thinking about or understanding this situation?</li> </ol>
<p><b>E</b> Evaluate</p>	<p>"How do you think she may feel now?" SUDS ____ /10</p> <p style="text-align: right;">320 t</p>

# Thought Analysis for Martin

This exercise is to be completed at the workshop

<b>A</b> Actual Event	"What happened?"
<b>B</b> Beliefs/ Thoughts	"What did he think?"
<b>C</b> Consequences	"How did he feel?" "What did he do/say?" SUDS ____ /10 "What Physical Reactions did he have?"
<b>D</b> Dispute	<ol style="list-style-type: none"><li>1. What evidence supports this thought?</li><li>2. What evidence does not support this thought?</li><li>3. Is this thought helpful- does it make him feel better about things? YES/ NO</li><li>4. Is he using any Automatic Negative Thoughts (ANTs)? Use ANTs sheet if you like</li><li>5. Based on the evidence, is there an alternative, or a more useful way of thinking about or understanding this situation?</li></ol>
<b>E</b> Evaluate	"How do you think Martin may feel now?" SUDS ____ /10 <div>321</div>

# Thought Analysis- Skills Practice

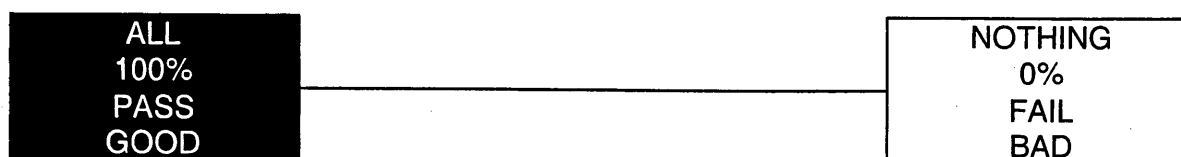
This exercise is to be completed at the workshop

<p><b>A</b></p> <p><b>Actual Event</b></p>	<p>"What happened?"</p>
<p><b>B</b></p> <p><b>Beliefs/ Thoughts</b></p>	<p>"What did you think?"</p>
<p><b>C</b></p> <p><b>Consequences</b></p>	<p>"How did you feel?" "What did you do/say?" SUDS ____ /10          "What Physical Reactions did you have?"</p>
<p><b>D</b></p> <p><b>Dispute</b></p>	<ol style="list-style-type: none"> <li>1. What evidence supports this thought?</li>   <li>2. What evidence does not support this thought?</li>   <li>3. Is this thought helpful- does it make me feel better about things? YES/ NO</li> <li>4. Am I using any Automatic Negative Thoughts (ANTs)? Use ANTs sheet if you like</li>   <li>5. Based on the evidence, is there an alternative, or a more useful way of thinking about or understanding this situation?</li> </ol>
<p><b>E</b></p> <p><b>Evaluate</b></p>	<p>"How do you feel now?" SUDS ____ /10</p> <p style="text-align: right;">322</p>

# Black & White Thinking

**The following are some steps to challenging rigid, perfectionist thinking styles. These steps are explained during the group discussion. They do not need to be understood before the workshop.**

1. Definition: Make sure the patient understands the definition.



2. How realistic is it to expect perfection all the time?

If there are 100 things that have to be done in one day, including:

being a good parent,  
being a good child,  
doing all the tasks in your workplace perfectly,  
being a good friend,  
caring for your body,  
doing enough recreation / relaxation,

how many can you get done at 100%? Get a rating for this (usually between 0 - 50%).

3. How possible is it for things to be 100% perfect: Can't things always be a little better, cleaner, fitter etc.?
4. "Failure" and its effect on self esteem

If you think in a black and white manner all the time, you're going to fail at least 50% of the time. Every day, before you even get out of bed, you're going to fail. What does that do to your self-esteem? (lowers it). So this leaves you feeling bad and its not even possible for anyone to be 100%, 100% of the time.

5. Effect on motivation

Often when people think they have to get a job done perfectly they say they've got to be in just the right mood at just the right time to do the job. The job can get put aside until later- "I'll do that when I feel up to it".

Then another task can need doing and that can get put aside, and then another one and another, until in the end there can be a whole mountain of things put aside until later. 323

That mountain then becomes something that has to be tackled 100% and gets put off. Not getting things done can also effect self-esteem.

## 6. Standards

Sometimes at this point people can get really anxious, and state that if you don't strive for perfection standards will slip. At this point you can stress that you can still maintain standards, but not impossible ones. 90% does not equal 0%. This is just a fact. A more helpful, realistic, flexible thinking style is to look at the "shades of grey".

0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100%

You can still set standards. You might not want to settle for 20%, but 80% may be perfectly reasonable, or may get the job done just fine.

## 7. Cost / Benefit Analysis

At this point ask for all the good things about black and white thinking (benefits), and there are some. Then look at the costs [to self, other and relationships]. Ask your patient which one weighs more.

Don't challenge the benefits, just list them, and let the patient decide.

Some suggestions....

BENEFITS	COSTS
<ul style="list-style-type: none"><li>• Things get done well</li><li>• Some jobs require 100% standards or people may die (eg. police, nurse dispensing medicine)</li><li>• Maintains standards in society</li><li>• Sometimes makes choices easier: there are only two choices</li><li>• Etc.,</li></ul>	<ul style="list-style-type: none"><li>• Lowers self-esteem</li><li>• Not possible to get 100% in many cases- if you always expect this and it's not even possible- you're setting yourself up to fail</li><li>• Can lead to anger with self</li><li>• Can cause conflict in family, and may lower self-esteem in family members (eg. children might think "nothing I do will ever please dad anyway"; "I'll never get it right- why should I try")</li><li>• Lowers motivation</li><li>• MASTERY vs PLEASURE- When you approach every task believing that you have to master it (or get it perfect) it can take a lot of pleasure out of the task. Remember the two boys on the rollerblades?</li><li>• Etc.,</li></ul>

# Literal Challenge



This challenge helps people to put their actions and beliefs about themselves into perspective. It involves having the person **literally define** exactly what the word they are using means; then having them generate extreme **examples** of the type of person or behaviour that would fit this definition; then having them **review** their statement of themselves in relation to this definition and examples. Consider the following case example.

*Charmaine is 22 and works in a bookstore. She has one close friend, but has never had a boyfriend. She has several acquaintances- people at work that she may have lunch with, but she is very shy. She is quite depressed. She has come to see her doctor and keeps calling herself a loser.*

Charmaine's doctor completed an ABCDE form with her. They challenged her statement that she was a loser. Charmaine was asked to give the **literal definition** of a loser. She said it's someone who never wins at anything ever in life, someone that has no luck, no talents, no prospects and no friends.

She was then asked to give **examples** of the types of people that could be called losers according to this definition. She listed people who had never had a job and never would have one, people who had nobody at all to care about, or who cared about them because they were completely unlovable. She was asked what types of people would be completely unlovable. She cited drug dealers, paedophiles and 'granny bashers'. This was put onto a chart, with the opposite, examples of the coolest people in the world up the other end.

## LOSER

### Total reject

- drug dealers
- paedophiles
- 'granny bashers'

## WINNER

### Coolest person in the world

- John Travolta
- Jennifer Anniston
- Madonna

Charmaine was then asked to **review** her statement that she was a loser by placing a mark on the line where she believed she fitted. Maybe not up there with Madonna, but not down there with the granny bashers either. The other challenges for the D column were also used to challenge this statement.



## Best Friend Challenge

This is a really effective challenge of a negative self-statement. It involves asking the patient the name of somebody they really like or respect (get their first name).

Ask them to imagine that this person was involved in exactly the same situation that had happened to them.

Ask them to imagine that this friend had done exactly what they themselves had done in the situation.

Then ask them to imagine that a third person (an outsider who was not involved) came up to them after the event and said that their friend was a ... (substitute the word they had been using about themselves). Ask what they would say to this person.

Ask them whether they would stick up for their friend, and if so, why.

Ask them why they have a different standard for themselves- is it because they are better than their friend? (Ask the latter question gently).

Consider the following case example:

*Danny was a police officer called to a domestic. It was particularly loud and vicious. They knew that the perpetrator was armed with a knife and psychotic. When they were in the house they found the body of a woman behind the door with her throat slashed. The perpetrator was nowhere to be seen. Danny found himself wanting to flee for the first time in his career. He thought about running away, but kept going. The man was captured.*

Danny used the negative self-statement "I'm a coward". Using the best friend challenge, Danny stated that the man he most admired in the police force was a former partner, Bill. He stated that if Bill was involved in the same situation and had the same thoughts and feelings and a civilian had said Bill was a coward, Danny would "punch his face in". He was asked whether he thought Bill had ever been scared. He agreed he would have. He realised he was applying different standards for himself and others, and thought about the matter in a different light.



## Case Study: Kevin

**This exercise is to be completed at the workshop**

Kevin is 25 years old. He is currently unemployed. He comes to see you because of a gash over his eye that he got during a fist fight he had with a friend of his while he was in the pub. While speaking with him you learn that he has been in a number of fights over the last few months. He also tells you that he has had problems sleeping recently. As you continue to talk to Kevin you notice that he is continually making negative remarks about himself. He states that he is "useless", "hopeless" and would be "better off dead".

- In your further assessment of Kevin's problem, what features from the history above would you want to know more about?
- Complete a behavioural assessment for this problem (Functional Analysis: Before, During, After). Could anything that Kevin did reinforce or create dysfunctional behaviour patterns?

<b>Before</b>	
<b>During</b>	
<b>After</b>	

- What preliminary techniques could you teach Kevin to help him manage his problems?

## Case Study: Kelly

**This exercise is to be completed at the workshop**

Kelly is a 29 year old school teacher. She also works as a part-time volunteer for the State Emergency Service (SES). She comes to see you stating that she is afraid that there is something wrong with her heart. She states that she has recently been experiencing a tightness across her chest and has noticed that her heart "races" at these times. Kelly also reports that the day before she came to see you, just prior to an important meeting at school, she found that she couldn't breathe and felt as though she was going to faint. She stated that she experienced the same tightness across the chest and racing heart beat. She reported that she had had to leave work and had gone home. She stated that she started to feel better after she had a few glasses of wine.

After examining Kelly, questioning her about her medical history and reviewing tests of her cardiac functioning, you can find no obvious medical cause for her complaints.

- In your further assessment of Kelly's problem, what features from the history above would you want to know more about?
- Complete a behavioural assessment for this problem (Before, During, After). Could anything that Kelly *did* or *felt* reinforce or create dysfunctional behaviour patterns?

<b>Before</b>	
<b>During</b>	Consider the escape from work as a problem behaviour. Why do you think this could be a problem?
<b>After</b>	

- ♦ What preliminary techniques could you teach Kelly before she leaves your office?

# Workshop Skills Review

**This exercise is to be completed at the workshop**



Think about some patients who have left you feeling stressed. Choose 3 that you feel needed some psychological intervention, but you didn't feel equipped to do this at the time. Write down their first names below.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Think about everything you've learned over the past 2 days. (Use the sheet you got this morning to help you remember if you like). Now write down some of the strategies you could have tried- or will try- with these people.

1	2	3

What problems, if any, do you think would remain unresolved even after these interventions?

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# Recommended Reading

## *For your patients*

Aisbeth B. (1994) **Living with IT: a survival guide to panic attacks**. Australia: A & R

Page A (1993). **Don't Panic! Overcoming Anxiety, Phobias and Tension**. Sydney, Australia: Gore and Osment Publications

Tanner S and Ball J (1991) **Beating the Blues: A Self-help approach to Overcoming Depression** Australia: Doubleday



*We KNOW you have a LOT to read, so if you are really interested in further reading, we've narrowed the field to some really good texts.!*

## *For Yourself*

Hawton K, Salkovskis PM, Kirk J & Clark DM (1991) **Cognitive Behaviour Therapy for Psychiatric Problems: A Practical Guide** UK: Oxford Medical Publications

Andrews, G., Crino, R., Hunt, C., Lampe, L., & Page, A. (1994) **The Treatment of Anxiety Disorders: Clinicians Guide & Patient Manuals**, Cambridge University Press, USA.

Greenberger, D. & Padesky, C. A. (1995) **Mind Over Mood: A Cognitive Therapy Treatment Manual for Clients**, Guildford Press, New York.

Egan, G. (1994) **The Skilled Helper: A Problem Management Approach to Helping**. 5th Edition Brooks Cole Publishing Pacific Grove California

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NOTE: ☺ Indicates particular suitability as self-help references for your patients

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## Appendix H: Training program learning outcomes

**Counselling Component:** Upon completion of the program the participant will be able to:

- List the behaviours that demonstrate sound listening skills
- Use sound listening skills to validate patients' problems
- List how empathy can be demonstrated
- Use empathy as a method to demonstrate understanding of patients' problems

**Behaviour Therapy Component:** Upon completion of the program the participant will be able to:

- Express and understand the role of learning in the development and maintenance of common psychological problems
- Conduct a behavioural assessment
- List the benefits of arousal reduction (stress management)
- State the role of hyperventilation in anxiety disorders
- Assist patients to prevent and stop hyperventilation during a panic attack
- Practise and teach at least 10 methods to reduce arousal, including breathing retraining, grounding and various relaxation procedures
- Define burnout and identify personal symptoms of stress and fatigue
- Apply several physical, psychological, interpersonal and professional strategies to prevent burnout and facilitate self-care

**Cognitive Therapy Component:** Upon completion of the program the participant will be able to:

- Express and understand that our beliefs and thought processes guide and create our behaviour and emotions
- State the role of unhelpful, or irrational, thinking in creating and maintaining common emotional problems
- Explain the rationale of cognitive therapy to patients
- Conduct a cognitive assessment
- Identify common cognitive distortions
- Help patients to identify and monitor their thoughts
- Help patients to challenge irrational thinking



## **Appendix I: CD copy of analyses**

## **Appendix J: Ethics approval details**

Research Office use only

HE 01/ \_\_\_\_\_

UNIVERSITY OF WOLLONGONG/ILLAWARRA AREA HEALTH SERVICE

HUMAN RESEARCH ETHICS COMMITTEE

INITIAL APPLICATION FOR APPROVAL TO UNDERTAKE  
RESEARCH INVOLVING HUMAN PARTICIPANTS

(A separate application is required for each project)

Please answer questions in terms understandable to the layperson.

1. Descriptive Title of Project:  
Managing Health-Related Anxiety in General Practice: A Cognitive Behavioural Approach
2. 7 line summary of project aims:

The aim of this research is to investigate the efficacy of a training program for General Practitioners in reducing their patients' health-related anxiety. This project aims to measure the effect of the program upon patients, by administering a questionnaire that measures their perceptions of their symptoms and their coping styles before and after their doctor presents a rationale and treatment technique learned during the training program. These results will be compared with patients whose GPs have not attended the training program. The project will also measure general psychological symptoms and a personality variable in patients presenting to their GPs with health-related concerns.

3. Name      Position/Appointment      Institution      Qualifications  
Chief Investigator(s)      (Academic or Professional)

Leah Giarratano, Clinical Psychologist, *B. A. Hons., M. Clin. Psych., MAPS, MCCP*

Address for Correspondence (1<sup>st</sup> named investigator):

10 Eskdale Street, MINCHINBURY, NSW, 2770

Contact Phone Number:

(02) 9832 9471

Fax:

(02) 9832 9471

Email:

[psycon@bigpond.net.au](mailto:psycon@bigpond.net.au)

Other Participating Researchers: (names/address/contact details of other researchers working on this project)

Dr Craig Gonsalvez, Director of Clinical Programs, Department of Psychology, University of Wollongong

4. Where will potential participants be approached by the researchers to seek their participation in the research and where will research activities involving participants be conducted:

Participants in the training program (GPs) will be approached via advertisements placed in Royal Australian College of General Practitioners (RACGP) and GP Divisions publications. The training will be conducted at the Macquarie Graduate School of Management (independent hire of a lecture hall). Patients involved in the study will be asked by their GP if they would be willing to be involved when they present to the practice. The patient will complete questionnaires on the first occasion in the doctor's rooms, and on the second occasion at the patient's home.

## Purpose and Funding of Project

- 5.a Is this: ☐ Staff Research (University of Wollongong)  
☐ Staff Research (Illawarra Area Health Service)  
☒ Student Research (Post grad. degree or subject)  
 Course undertaken: Doctor of Psychology  
 Unit/ Faculty/ Department: Department of Psychology  
 Supervisor: Dr Craig Gonsalves  
☐ Other (Please specify e.g. for external people who want to research Uni students or IAHS clients)

- 5.b What is the source and amount of funding from all sources for this research?

Source (Name of Organisation / Funding Scheme)	Amount
There is no funding	

- 5.c Is there any affiliation or financial interest between the sponsor/funding body and the researcher(s) or supervisor associated with this research? If Yes, Please declare.

Not applicable.

- 5.d Are there any conditions placed on this research by the funding body? (please provide details) YES/NO

Not applicable.

- 5.e Is a copy of the HREC approval to be forwarded to the Granting Body? YES/NO

Not applicable.

If YES, please advise of any deadlines: Not applicable.

6. Has this research project been reviewed by any other Institutional Ethics Committee? (for example multi-centre research) YES/NO

If YES, include a copy of any correspondence the sponsor or researcher has entered into with the other Ethics Committee(s) to this point.

## 7. Research Categories

Please mark the research categories relevant to this research proposal. See guidelines for descriptions of the categories. At least one category should be marked for each grouping. For "Other", please specify.

If your research only involves participants and research procedures from a-d under **A Participants and B Research Procedures Used**, it may be open to expedited review by the Chair of the HREC. In that case, submit only one copy of your application (please see guidelines regarding expedited review).

**A Participants**

- a. Healthy members of the community
- b. University students
- c. Employees of a specific company/organisation
- d. Members of a specific community group, club or association
- e. Clients of a service provider
- ☒ f. Health Service clients (e.g. users/clients of a health service)
- g. School children
- h. Hospital in-patients
- ☒ i. Clinical clients (e.g. patients)
- j. Aboriginal/Torres Strait Islander people
- k. Members of socially disadvantaged groups
- l. Cadavers/ cadaveric organs
- ☒ m. Other: General Practitioners

Expected age(s) of participants - please circle one or more

Children (under 14)    Young people (14-18)

☒ Adults (> 18)

**B Research procedures used**

- a. Anonymous questionnaires/ surveys
- ☒ b. Coded (potentially identifiable) questionnaires/ surveys
- c. Identifiable questionnaires/ surveys
- d. Examination of student work, journals etc
- e. Examination of medical, educational, personnel or other confidential records
- f. Observation (overt)
- g. Observation (covert)
- h. Interviews (structured or unstructured)
- i. Telephone interviews
- j. Procedures involving physical experiments (e.g. exercise, reacting to computer images)
- k. Procedures involving administration of substances (e.g. drugs, alcohol, food)
- l. Physical examination of participants (including eg. blood glucose, blood pressure and temperature monitoring)
- m. Collection of body tissues or fluid samples
- n. Surgical procedures
- o. Other: \_\_\_\_\_

**C Research areas**

- a. Qualitative research
- b. Social Science research
- c. Humanities research
- d. Educational research
- e. Health research
- ☒ f. Psychological research
- g. Comparison or evaluation of drugs or surgical or other therapeutic devices
- h. Comparison or evaluation of clinical procedures
- ☒ i. Comparison or evaluation of counselling or training methods
- j. Investigation of the effects of an agent (drug or other substance)
- k. Investigation of bio-mechanical processes
- l. Biomedical research
- m. Epidemiology
- n. Genetic research

o. Other: \_\_\_\_\_

8.a Does the project involve the use of drugs?

YES/NO

If YES give details:

Is the research clarified as a:

CTN Trial

CTX Trial

Other (Please detail)

8.b Does the project involve the use of a surgical or other therapeutic device? (please detail)

YES/NO

8.c If you answered YES to 8a. or 8b., is there any business or similar association between the researcher and the supplier of a drug or surgical or other therapeutic device to be used in the trial? (please detail).

**If you answered YES to 8a. or 8b., please include the budget for this trial including information about capitation fees, payments to researchers, institutions or organisations involved in the research, current and consequential costs and costs which may be incurred by participants.**

**Please include evidence of arrangements to ensure adequate compensation to participants for any injury suffered as a result of participation in the trial. (Indemnification forms and, if the research is being undertaken in a private practice, evidence of adequate and appropriate insurance coverage)**

9. Justify the design of your proposed research and describe what you want participants to do.

Please provide an explanation, in terms understandable by a non-expert reader. For student researchers, please provide (in no more than 2 pages) the background to this project (Attach extra sheets if necessary)

A review of scientific literature regarding the management of health-related anxiety indicates that cognitive behavioural approaches are very effective in treating somatisation and abnormal illness behaviour (e.g., Lidbeck, 1997; Kroenke & Swindle, 2000), and research indicates that early management of these problems is preferable. As GPs are the first port of call for these patients, the earliest management is when they present to their GP for medical tests for their symptoms.

This project will recruit between 60 and 80 GPs to participate in a training program that will impart basic cognitive and behavioural treatment strategies for patients presenting with health-related anxiety. The program consists of a pre-reading manual, a two-day supervised, skills-based workshop and patient handouts.

GPs who apply to complete the program, and agree to be part of the study will be allocated to either an Experimental or a Control group. The Experimental Group will complete the training program as one group first. The Control Group will complete the training program on a later date. Allocation to groups will be random.

GPs allocated to the Control Group will be asked to approach between 1 and 5 patients to see whether they would like to be involved in the study. These patients, if they consented, would complete the set questionnaires. These patients will have presented to their GP with physical concerns that could be anxiety-related. When the patient returns to see this GP following any medical tests they may have routinely conducted, the GP will be asked to give them the results of these medical tests in the manner that they normally would, and to give these patients the same questionnaires

to be completed from their home one week later and returned to the researcher (patients whose medical tests show that the symptoms are signs of a physical illness will not be included in the project).

Control Group GPs will then complete the training program and will then undertake the same procedures as the Experimental Group (see below).

GPs allocated to the Experimental Group will be asked to approach between 1 and 5 patients to see whether they would like to be involved in the study. These patients, if they consented would complete the set questionnaires. These patients will have presented to their GP with physical concerns that could be anxiety-related. When the patient returns to see this GP following any medical tests they may have routinely conducted, the GP will be asked to give them the results of these medical tests, and also explain their symptoms using the cognitive behavioural rationale taught during the training program. They will also teach the patient at least one of the skills taught during the program, and the give them same questionnaires and a monitoring form to be completed by the patient from their home one week later and returned to the researcher (patients whose medical tests show that the symptoms are signs of illness will not be included in the project).

Appendix B contains a chart that diagrammatically explains the above process.

In summary:

- ◆ GP participants will complete a training program, and ask patients with symptoms that could be consistent with anxiety whether they would like to be involved in the study, and if so, to give them some questionnaires to complete. If their medical tests show no evidence of pathology, during their next appointment Control Group GPs will give them this feedback as they usually would, and Experimental Group GPs will use their new skills from the training program to give the feedback, and will teach a cognitive or behavioural skill to manage the symptoms. In both cases their patients will re-complete the questionnaires one week after seeing the doctor.
- ◆ Patient participants will be asked whether they would like to participate in the study. If so, they will complete a questionnaire that asks them about their perceptions of their symptoms, a questionnaire that asks whether they have experienced a checklist of psychological symptoms, and a questionnaire that asks about their typical coping/ cognitive styles. If their routine medical tests show no evidence of physical pathology, the doctor will explain this to them and ask them to complete the same questionnaires a week later. Patients whose doctors were in the control group will get the feedback in exactly the same manner as if they had not been involved in the study. Patients whose doctors were in the experimental group will get the feedback with a cognitive behavioural explanation for their symptoms. They will also be taught a simple technique to practise at home for a week.



10. Please provide a brief statement of the ethical considerations relevant to the proposed research; specifically in relation to the participants' welfare, rights, beliefs, perceptions, customs and cultural heritage both individual and collective. (Attach an extra sheet if necessary)

This research project will assist patients who are suffering concerns about their physical health that are unfounded, that is, fear that they are suffering a physical disease or disorder where there is none. Their GP will perform all of the medical tests or procedures they would have undergone regardless of their involvement in the project, and the patients will only become part of the study if these tests are 'normal'/clear. Patient's participation in the study will be entirely voluntary and will not impact upon their medical treatment or relationship with their GP. Their participation will involve completing questionnaires on two occasions, and will also involve practising an anxiety reduction strategy (e.g., slow breathing, monitoring their thoughts) for one week. These strategies will be based upon cognitive behavioural principles and have been demonstrated repeatedly in world literature to be effective in the management of anxiety. These strategies will be taught by their GP who will have been trained in their use by a clinical psychologist with six year's experience in teaching such techniques to doctors. None of the techniques are harmful, and patients could encounter and learn them by reading a self-help book. The results of their questionnaires will be made available to their doctor, if they give consent for this to happen, so that their progress can be monitored by their GP. These questionnaires will be stored at the University of Wollongong in a locked filing cabinet belonging to Dr Gonsalvez.

GPs involved in the study will not engage in any harmful, distressing or dangerous procedures. Their involvement is also purely voluntary, although they are likely to receive continuing medical education points for participating in the training. Any data that is collected in terms of their learning during the education program will be fed back to the doctor so that they can see their progress, but will not be made available to any other person or organisation.

11. Referring to the categories of participants to be involved in this project identified in question 7, above, What is the rationale for selecting participants from this/these group/s?

Patients with health-related anxiety present frequently to General Practitioners, and can prove time consuming and difficult for them to manage. Previous data collected by the researcher during the past six years indicates that many GPs in Australia feel a lack of confidence and have a lack of knowledge for teaching basic techniques to help reduce this anxiety and help the patients understand their symptoms. World literature confirms that this is currently a universal finding. Involvement of GPs in this fundamental level of counselling is currently a high priority of the Australian commonwealth government. This project aims to demonstrate that it is possible to relatively quickly provide GPs with the knowledge and confidence to manage these patients more effectively.

12. How will potential participants be approached initially and informed about the project? Please explain in detail and include copies of any letters, advertisements or other recruitment information. (e.g. direct approach to people on the street, mail-out to potential participants through an organisation, posters or newspaper advertisements, etc)

GPs will be informed about the project via the advertisements placed in their College/ Division newsletters (please see Appendix A for a copy of the advertisement). The advertisements will inform them that if they choose to participate in the training program, they agree to be part of the research project. They can request and will be sent/ emailed/ faxed an additional program and project information sheet (please see

Appendix B for a copy of the information sheet), which explains the project in more detail.

Potential patients will be identified by their GP when they present to their doctor. These patients will present with symptoms that could be consistent with anxiety. The GP will perform any tests they would ordinarily do under such circumstances in order to rule out any organic pathology, and then will ask the patient whether they would consider being involved in the study. The patient will be given an information sheet and consent form (please see Appendices C and D), and if they choose to be involved in the project, will complete the questionnaires, seal them into the accompanying envelope, and leave them with the receptionist, who will then forward them to the principle researcher. They will only be included in the second part of the study if the tests performed by the doctor do not indicate any evidence of physical disease or disorder.

13. How many participants in total do you anticipate will be involved in the project? If the research has several stages involving different participants, please provide the total number of participants expected as well as the number of participants involved in each stage.

Number of GPs: 60 – 80

Number of patients: Approximately 150 (this will depend upon how many patients suitable for inclusion in the project present to their GPs,).

14. Participant Consent

Attach copies of any letters of invitation, information packages, consent forms, proxy/substitute consent forms, debriefing information, identification cards, contact detail cards, etc.

Please see Appendices C, D and E.

- 14 a. Is it anticipated that all participants will have the capacity to consent to their participation in the research?

☒ YES / NO

If NO, please explain why (e.g. children, incompetent participants, etc.) and explain how proxy or substitute consent will be obtained from the person with legal authority to consent on behalf of the participant (see Guidelines).

- 14 b. For participants who have the capacity to consent, how does the process ensure that informed consent is freely obtained from the participant?

Written information and consent forms will be provided at two points in the study. The first point involves training the General Practitioners, and they will be asked to sign the consent form before they are recruited into the study and training commences. The second point involves the patient presenting to their GP, where written information and a consent form will be provided. This form will advise them that they are free to withdraw from the study at any time without penalty.

- 14 c. Will written consent from participants be obtained?

☒ YES / NO

If NO, please explain why it would be inappropriate or unethical to seek written evidence of consent to this project.

15. Are any participants in a dependant relationship with the researcher, the institution or the funding body (for example the researcher's clinical clients or students; employees

of the institution; recipients of services provided by the funding body)? If so, what steps will be taken to ensure that participants are free to participate or refuse to participate in the research?

The patients of the GPs are in a relatively dependant relationship with their doctor. In the information about the project, and in the written and oral instructions given to the GPs it will be emphasised that the patient is free not to participate in the research without fear of penalty or prejudice, or any impact upon their future treatment by their GP.

16. How does the project address the participants' freedom to discontinue participation? Will there be any adverse effects on participants if they withdraw their consent and will they be able to withdraw data concerning themselves if they withdraw their consent?

In the information about the project and in the consent form provided to the patient, and in the written and oral instructions given to the GPs it will be emphasised that the patient is free to discontinue their participation in the research without fear of penalty or prejudice, or impact upon their future treatment by their GP. As their questionnaires will be coded, it would be possible to trace and delete, destroy or return to the patient their questionnaires if they chose to withdraw from the study.

GPs are free to withdraw from the study at any time, and this will be included in the written information about the program and project.

17. Does the project involve withholding relevant information from participants or deceiving them about some aspect of the research? YES/NO

If YES, what is the justification for this withholding or deception and what steps will be taken to protect the participants' interest in having full information about their participation?

18. Will participants be paid or offered any form of reward or benefit (monetary or otherwise) for participation in the research? If so, please detail and provide a justification for the payment, reward or benefit.

GPs will receive Continuing Medical Education (CME) points for participating in the training, and Clinical Audit points for participating in the post-training project. Both of these points are awarded by the RACGP for any approved training activity that increases their knowledge or skills, or the application of these skills or knowledge in their General Practice. There is a vast array of CME and Clinical Audit activities that GPs can attend; the points have been applied for through the RACGP merely so that participating doctors can have their learning and involvement acknowledged by their college.

19. Confidentiality:

What measures will be taken to protect the privacy of individual subjects in terms of the test results and other confidential data obtained (both in recording the data and in its publication)?

Questionnaires will be stored in a locked filing cabinet in Dr Gonsalvez's laboratory at the University of Wollongong, and will not be made available or identifiable to any other person or organisation. The questionnaires will not record the patient's or GP's names, but will hold codes that will enable the researcher to identify the subject from a separate database. This is so that GPs can receive feedback about their performance and about the progress of their patients.

20. Will information collected from data or interview be published?

YES/NO

If YES, please indicate what form this will take (Please note that any further use of information which may identify a participant is conditional upon the participant's permission for such use):

It is anticipated that the results of this study will be published in peer-reviewed academic journals. No identifiable data will be published following the study.

21. Will any part of the research activities be placed on an audiotape, film, photograph or video-tape? YES/NO

To what purpose will the audiotape, film, photograph or video-tape be used?

For what audience(s) will the audiotape, film, photograph or video-tape be exhibited?

22. How will the data (including questionnaires, surveys, computer data, tapes, transcripts and specimens) be held securely, during and on completion of the project?

Questionnaires will be stored in a locked filing cabinet. Questionnaires will be stored in a locked filing cabinet in Dr Gonsalvez's laboratory at the University of Wollongong, and will not be made available or identifiable to any other person or organisation. The questionnaires will not record the patient's or GP's names, but will hold codes that will enable the researcher to identify the subject from a separate database. This is so that GPs can receive feedback about their performance and about the progress of their patients.

Please confirm that original data will be held securely for a minimum of 5 years (15 years for clinical research). YES/NO

If NO, please give reasons why it would be unethical to store the data for this period.

23. Does the project involve the use of invasive procedures (e.g. blood sampling) or the risk of physical harm or emotional distress? YES/NO

If YES, give details:

Explain how the risks of harm or distress will be minimised. In the case of risks of emotional distress, what provisions have been made for an exit interview or the necessity of counselling?

24. Does this project involve obtaining information (e.g. data) of a private nature from any Commonwealth/State/Local Government Department or any other Agency, including health records from Area Health Services. YES/NO

If YES, which Department (s)/Agency?

Please include copies of any correspondence regarding permission to access this information from a responsible officer of the Agency and complete a Privacy Guideline Form (available from Ethics Officer).

25. Does the research intend to determine whether illegal activity has occurred or anticipate that participants may reveal information about criminal activity? YES/NO

If YES, how do you propose to respond to the legal issues raised?

26. Period of Research Clearance Requested (Please specify as near as possible 'start' and 'finish' dates for the conduct of research):

FROM: ...../.....04../....2001..... TO: ...../.....06.../.....2002...

27. Any research project that involves the collection of data should be designed so that it is capable of providing information that can be analysed to achieve the aims of the project. Usually, although not always, this will involve various important statistical issues. It is important that the design and analysis be properly planned in the early stages of the project. You should seek statistical advice. The University of Wollongong has a Statistical Consulting Service that provides such advice to research students and staff undertaking research.

Are statistical issues relevant to this project? ☒ Yes ☐ No

If so, have you discussed this project with the Statistical Consulting Service? Yes ☐ No ☒

Comments:

The principle researcher and her supervisor are confident that they have designed the study adequately and selected appropriate statistical measures. Should this change, and advice be required, we will consult the statistics expert within the Department of Psychology, University of Wollongong.

DECLARATION BY CHIEF INVESTIGATOR

I, the undersigned, have read the current National Statement on Ethical Conduct in Research Involving Humans (available from the NHMRC web site at <http://www.health.gov.au/nhmrc/publicat/e-home.htm> ) and accept responsibility for the conduct of the research activities detailed in this application in accordance with the principles contained in the National Statement and any other conditions laid down by the University of Wollongong's Human Research Ethics Committee.

Chief Investigator's signature/s:

Date:

If the Chief Investigator is a student include:

Supervisor's signature:

Date:

Signature/s of other researcher/s: (The first named researcher will assume responsibility for the project in the absence of the Chief Investigator)

Date:

Date:

Date:

DECLARATION BY HEAD OF UNIT

As Head of Unit I have responsibility for ensuring that Occupational Health and Safety (OHS) issues surrounding research in the Unit are addressed.

(please tick all relevant boxes)

- ☐ I am satisfied that a general risk assessment for the research project addressed in this application has been completed adequately
- ☐ I will ensure that a risk assessment specific to this application will be completed prior to commencing the activities described in this application
- ☐ I will ensure that there exist appropriate mechanisms to address potential OHS issues that may arise and I have responsibility for implementing those mechanisms
- ☐ I will ensure that mechanisms exist for ongoing assessment of the OHS issues related to this research
- ☐ This research involves use of radiation, chemicals or biohazards. A Risk Assessment has been conducted and is attached to this application

Head of Unit's Signature.....Date.....

NOTE: RESEARCH MUST NOT COMMENCE UNTIL APPLICATION HAS BEEN FULLY APPROVED.

### CHECKLIST

Applications should be sent to the Ethics Officer, Human Research Ethics Committee, Office of Research, University of Wollongong, Northfields Ave, Wollongong NSW 2522 .

- ☒ Original Ethics Application plus appropriate number of copies (See Guidelines)
- ☒ Consent Form(s)
- ☒ Participant Information Sheet/Package
- ☒ Copies of Questionnaire(s)/Survey(s) or Interview Questions
- ☒ Copies of all documents and other material used to inform potential participants about the research including advertisements and letters of invitation.
- ☐ NA Evidence of permission to conduct research in locations not associated with the University of Wollongong
- ☐ NA Evidence of approval/rejection by other HREC(s), including comments and requested alternations to the protocol
- ☒ Any form requiring signature by the HREC (one copy)
- ☐ NA For Clinical Trials : Application Form (original +14 copies), Patient Information Package (14 copies), Consent Forms (14 copies), Indemnity Form (14 copies), Protocols (14 copies), Advertisement (14 copies), Summary Sheet (14 copies), Budget (14 copies), Insurance information (if in Private Practice) (14 copies), Investigator's Brochure (5 copies), CTN or CTX Form (1 original copy)

Form Revised Feb 2001

### MEETING DATES FOR 2001

#### AGENDA DEADLINE

30 January 2001  
27 February 2001  
27 March 2001  
1 May 2001  
29 May 2001  
26 June 2001  
31 July 2001  
28 August 2001  
2 October 2001  
30 October 2001  
27 November 2001

#### MEETING DATES

13 February 2001  
13 March 2001  
10 April 2001  
15 May 2001  
12 June 2001  
10 July 2001  
14 August 2001  
11 September 2001  
16 October 2001  
13 November 2001  
11 December 2001

**CONDITIONAL APPROVAL**

In reply please quote: CT:KM HE01/080

Further Enquiries: Karen McRae (PH: 42214457)

Good Universities Guides

**AUSTRALIA'S UNIVERSITY OF THE YEAR**Preparing Graduates for the e-World — Joint Winner **2000-2001**Outstanding R&D Partnerships — Joint Winner **1999-2000**

22 May 2001

Ms Leah Giarratano  
10 Eskdale Street  
Minchinbury NSW 2770

Dear Ms Giarratano,

I am pleased to advise that the following Human Research Ethics application has been conditionally approved. As a condition of approval, the Human Research Ethics Committee requires that researchers immediately report anything which might warrant review of ethical approval of the protocol, including: serious or unexpected adverse effects on participants, proposed changes to the protocol, unforeseen events that might affect continued ethical acceptability of the project and discontinuation of the research project before the expected date of completion.

Ethics Number: HE01/080

Project Title: Managing Health-Related Anxiety in General Practice: A Cognitive Behavioural Approach

Name of Researchers: Leah Giarratano, Dr Craig Gonsalvez

Approval Date: 15 May 2001

Duration of Approval: 14 May 2002

This approval is granted subject to the following conditions and relates to the research protocol submitted in your original application of 30 April 2001 :

- (i) please provide a copy of the questionnaire
- (ii) is there a need to provide for a baseline understanding by GP's of anxiety disorders?
- (iii) the Information Sheet for Practitioners should state that they are free to withdraw from the project at any time and, if they do, any data they have provided can be withdrawn.

Please provide written clarification of the conditions to the Secretary of the Committee before commencing your research, or approval will be withdrawn.

Assoc. Professor Colin Thomson  
**Chairperson**  
**Human Research Ethics Committee**

cc. Supervisor, Dr Craig Gonsalvez, Psychology





## RENEWAL

In reply please quote: SD:KM HE01/080

Further Enquiries: Karen McRae (PH: 42214457)

Good Universities Guides

AUSTRALIA'S UNIVERSITY OF THE YEAR

Preparing Graduates for the e-World — Joint Winner 2000-2001

Outstanding R&amp;D Partnerships — Joint Winner 1999-2000

20 June 2002

Ms L. Giarratano  
10 Eskdale Street  
Minchinbury NSW 2770

Dear Ms Giarratano,

I am pleased to advise that **renewal** of the following Human Research Ethics application has been **approved**. As a condition of approval, the Human Research Ethics Committee requires that researchers immediately report anything which might warrant review of ethical approval of the protocol, including: serious or unexpected adverse effects on participants, proposed changes to the protocol, unforeseen events that might affect continued ethical acceptability of the project and discontinuation of the research project before the expected date of completion.

Ethics Number: HE01/080

Project Title: Managing Health-Related Anxiety in General Practice:  
A Cognitive Behavioural ApproachName of Researcher/s: Ms L. Giarratano  
Gonsalvez, Dr C.

Final Approval Date: 19 June 2002

Duration of Renewal: 18 June 2003

This certificate relates to the research protocol submitted in your original application and includes all approved amendments to date. Please note that resesearch projects of long duration must be reviewed annually by the Committee and it will be necessary for you to apply for renewal of this application if experimentation is to continue beyond one year.

Assoc. Prof. Colin Thomson  
**Chairperson,**  
**Human Research Ethics Committee**

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## Appendix K: Study 3 IPQ-R descriptives & significance tables

IPQ-R group means and standard deviations at Time 1 and Time 2

Personal Control	Combined Trained Group (N=31)		Experimentals (N=17)		Pre-Training Controls (N=15)		Post-Training Controls (N=14)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Time 1	17.77	2.60	17.82	2.72	17.13	2.56	17.71	2.56
Time 2	19.84	2.68	19.59	2.12	16.67	2.41	20.14	3.30
Consequences	Combined Trained Group (N=31)		Experimentals (N=17)		Pre-Training Controls (N=15)		Post-Training Controls (N=14)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Time 1	18.61	4.18	17.88	3.97	16.87	3.91	19.50	4.40
Time 2	20.26	4.18	19.29	3.50	17.00	4.72	21.43	4.75
Treatment Control	Combined Trained Group (N=31)		Experimentals (N=17)		Pre-Training Controls (N=15)		Post-Training Controls (N=14)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Time 1	15.26	2.00	15.71	2.20	15.00	2.48	14.71	1.64
Time 2	16.48	2.66	15.24	2.54	14.87	3.09	18.00	1.96
Emotional Representations	Combined Trained Group (N=31)		Experimentals (N=17)		Pre-Training Controls (N=15)		Post-Training Controls (N=14)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Time 1	19.77	4.31	19.71	3.75	18.07	3.71	19.86	5.05
Time 2	18.29	6.00	16.53	5.76	16.93	4.17	20.43	5.76
Illness Coherence	Combined Trained Group (N=31)		Experimentals (N=17)		Pre-Training Controls (N=15)		Post-Training Controls (N=14)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Time 1	13.42	5.01	14.35	4.95	16.73	3.88	12.29	5.03
Time 2	16.94	4.52	18.41	4.18	19.67	1.72	15.14	4.40

**IPQ-R analyses results: Combined Trained Group vs. Untrained Control Group**

<b>Personal Control</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,44) = 2.35$	0.133	
Time x Group Effect	$F(1,44) = 5.89$	0.019	✓
Between Group Effect	$F(1,44) = 9.22$	0.004	✓
<b>Consequences</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,44) = 2.61$	0.113	
Time x Group Effect	$F(1,44) = 1.89$	0.177	
Between Group Effect	$F(1,44) = 4.27$	0.045	✓
<b>Treatment Control</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,44) = 1.79$	0.188	
Time x Group Effect	$F(1,44) = 2.76$	0.103	
Between Group Effect	$F(1,44) = 1.94$	0.171	
<b>Emotional Representations</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,44) = 4.39$	0.042	✓
Time x Group Effect	$F(1,44) = 0.08$	0.780	
Between Group Effect	$F(1,44) = 1.21$	0.277	
<b>Illness Coherence</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,44) = 16.66$	0.001	✓
Time x Group Effect	$F(1,44) = 0.14$	0.714	
Between Group Effect	$F(1,44) = 7.64$	0.008	✓

**IPQ-R analyses results: Trained Control Group vs. Untrained Control Group**

<b>Personal Control</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,27) = 1.99$	0.170	
Time x Group Effect	$F(1,27) = 4.32$	0.047	✓
Between Group Effect	$F(1,27) = 7.66$	0.010	✓
<b>Consequences</b>		<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,27) = 3.09$	0.090	
Time x Group Effect	$F(1,27) = 2.35$	0.137	
Between Group Effect	$F(1,27) = 5.21$	0.031	✓
<b>Treatment Control</b>		<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,27) = 13.44$	0.001	✓
Time x Group Effect	$F(1,27) = 15.81$	0.001	✓
Between Group Effect	$F(1,27) = 3.41$	0.076	
<b>Emotional Representations</b>		<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,27) = 0.35$	0.558	
Time x Group Effect	$F(1,27) = 3.24$	0.083	
Between Group Effect	$F(1,27) = 2.46$	0.129	
<b>Illness Coherence</b>		<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,27) = 9.30$	0.005	✓
Time x Group Effect	$F(1,27) = 0.00$	0.968	
Between Group Effect	$F(1,27) = 16.38$	<0.001	✓

## Appendix L: Study 3 COPE scale descriptives & significance tables

Cope Scale group means and standard deviations at Time 1 and Time 2

<b>Factor 1: Problem-Focused Coping</b>	<b>Combined Trained Group (N=31)</b>		<b>Experimentals (N=17)</b>		<b>Pre-Training Controls (N=15)</b>		<b>Post-Training Controls (N=14)</b>	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<b>Time 1</b>	9.43	2.15	9.80	2.40	9.53	2.04	8.98	1.79
<b>Time 2</b>	10.27	2.34	10.65	2.48	9.81	2.15	9.81	2.15
<b>Factor 2: Emotion-Focused Coping</b>	<b>Combined Trained Group (N=31)</b>		<b>Experimentals (N=17)</b>		<b>Pre-Training Controls (N=15)</b>		<b>Post-Training Controls (N=14)</b>	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<b>Time 1</b>	9.07	3.26	9.72	2.89	10.36	2.80	8.28	3.61
<b>Time 2</b>	8.25	2.69	8.88	3.21	10.44	2.63	7.48	1.68
<b>Factor 3: Avoidance-Disengagement Coping</b>	<b>Combined Trained Group (N=31)</b>		<b>Experimentals (N=17)</b>		<b>Pre-Training Controls (N=15)</b>		<b>Post-Training Controls (N=14)</b>	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<b>Time 1</b>	7.16	1.17	7.18	1.74	7.33	1.86	7.14	1.75
<b>Time 2</b>	7.67	2.20	7.00	1.81	6.58	1.40	8.48	2.41
<b>Positive Reinterpretation and Growth</b>	<b>Combined Trained Group (N=31)</b>		<b>Experimentals (N=17)</b>		<b>Pre-Training Controls (N=15)</b>		<b>Post-Training Controls (N=14)</b>	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<b>Time 1</b>	2.14	0.80	2.29	0.86	2.33	0.79	1.95	0.70
<b>Time 2</b>	2.67	0.89	2.74	1.00	2.43	0.80	2.59	0.76

**Cope Scale group means and standard deviations at Time 1 and Time 2 (continued)**

<b>Focusing-on and Venting Emotions</b>	<b>Combined Trained Group (N=31)</b>		<b>Experimentals (N=17)</b>		<b>Pre-Training Controls (N=15)</b>		<b>Post-Training Controls (N=14)</b>	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<b>Time 1</b>	2.57	0.69	2.75	0.69	2.67	0.80	2.36	0.65
<b>Time 2</b>	2.27	0.64	2.26	0.74	2.63	0.71	2.29	0.54

<b>Denial</b>	<b>Combined Trained Group (N=31)</b>		<b>Experimentals (N=17)</b>		<b>Pre-Training Controls (N=15)</b>		<b>Post-Training Controls (N=14)</b>	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
<b>Time 1</b>	1.40	0.52	1.44	0.56	1.50	0.58	1.36	0.50
<b>Time 2</b>	1.55	0.54	1.51	0.56	1.12	0.31	1.59	0.53

**COPE Scale analyses results: Combined Trained Group vs. Untrained Control Group**

<b>Factor 1: Problem-Focused Coping</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	F(1,44) = 6.175	0.017	✓
Time x Group Effect	F(1,44) = 1.566	0.217	
Between Group Effect	F(1,44) = 0.073	0.788	

<b>Factor 2: Emotion-Focused Coping</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	F(1,44) = 0.796	0.377	
Time x Group Effect	F(1,44) = 1.226	0.274	
Between Group Effect	F(1,44) = 4.564	0.038	✓

<b>Factor 3: Avoidance-Disengagement Coping</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	F(1,44) = 0.115	0.736	
Time x Group Effect	F(1,44) = 2.889	0.096	
Between Group Effect	F(1,44) = 0.997	0.324	

**COPE Scale analyses results: Combined Trained Group vs. Untrained Control Group  
(continued)**

<b>Positive Reinterpretation and Growth</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,44) = 12.985$	0.001	✓
Time x Group Effect	$F(1,44) = 6.069$	0.018	✓
Between Group Effect	$F(1,44) = 0.007$	0.936	
<b>Focusing-on and Venting Emotions</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,44) = 3.904$	0.054	✓
Time x Group Effect	$F(1,44) = 2.493$	0.122	
Between Group Effect	$F(1,44) = 1.256$	0.268	
<b>Denial</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,44) = 1.230$	0.273	
Time x Group Effect	$F(1,44) = 7.953$	0.007	✓
Between Group Effect	$F(1,44) = 1.090$	0.302	

**COPE Scale analyses results: Trained Control Group vs. Untrained Control Group**

<b>Factor 1: Problem- Focused Coping</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,27) = 5.059$	0.033	✓
Time x Group Effect	$F(1,27) = 1.273$	0.269	
Between Group Effect	$F(1,27) = 0.153$	0.669	
<b>Factor 2: Emotion- Focused Coping</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1,27) = 0.360$	0.553	
Time x Group Effect	$F(1,27) = 0.561$	0.460	
Between Group Effect	$F(1,27) = 9.094$	0.006	✓

**COPE Scale analyses results: Trained Control Group vs. Untrained Control Group  
(continued)**

<b>Factor 3: Avoidance-Disengagement Coping</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1, 27) = 0.350$	0.559	
Time x Group Effect	$F(1, 27) = 4.594$	0.041	✓
Between Group Effect	$F(1, 27) = 2.894$	0.100	
<b>Positive Reinterpretation and Growth</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1, 27) = 13.379$	0.001	✓
Time x Group Effect	$F(1, 27) = 7.145$	0.013	✓
Between Group Effect	$F(1, 27) = 0.190$	0.666	
<b>Focusing-on and Venting Emotions</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1, 27) = 0.231$	0.635	
Time x Group Effect	$F(1, 27) = 0.310$	0.863	
Between Group Effect	$F(1, 27) = 2.060$	0.163	
<b>Denial</b>	<b>F value</b>	<b>p value</b>	<b>Significance (<math>\alpha=0.05</math>)</b>
Time	$F(1, 27) = 0.242$	0.627	
Time x Group Effect	$F(1, 27) = 7.563$	0.011	✓
Between Group Effect	$F(1, 27) = 0.863$	0.361	



# Appendix I